

**ATC**

# TEST REPORT

Applicant Name : Fanvil Technology Co., LTD.  
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North 2nd Road, Bao'an District, Shenzhen, 518101, China  
Report Number : SZNS220815-37077E-RF-00C  
FCC ID: 2APPZ-W611W

**Test Standard (s)**

FCC PART 15.407

**Sample Description**

Product Type: Portable Wi-Fi Phone  
Model No.: W611W  
Multiple Model(s) No.: N/A  
Trade Mark: **LINKVIL**  
Date Received: 2022/08/15  
Report Date: 2022/09/28

Test Result:	Pass*
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\* In the configuration tested, the EUT complied with the standards above.

**Prepared and Checked By:**

Handwritten signature of Andy Yu.

Andy Yu  
EMC Engineer

**Approved By:**

Handwritten signature of Candy Li.

Candy Li  
EMC Engineer

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk “\*”.

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## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

Frequency Range	5G Wi-Fi: 5150-5250MHz; 5725-5850MHz
Mode	802.11a/n20/n40/ac20/ac40/ac80/ax20/ax40/ax80
Maximum Conducted Average Output Power	5150-5250MHz: 17.20dBm 5725-5850MHz: 17.57dBm
Modulation Technique	OFDM, OFDMA
Antenna Specification*	2.0dBi (It is provided by the applicant)
Voltage Range	DC 3.8V from battery or DC 5V from adapter
Sample serial number	SZNS220815-37077E-RF-S1 for Conducted and Radiated Emissions SZNS220815-37077E-RF-S2 for RF Conducted Test (Assigned by ATC)
Sample/EUT Status	Good condition
Adapter 1 information	Model: AS1201A-0502000USL Input: AC100-240V,50/60Hz,0.35A MAX Output: DC5V,2000mA
Adapter 2 information	Model: GQ12-050200-AU Input: AC100-240V,50/60Hz,0.4A Max Output: DC5V,2.0A

### Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. And KDB789033 D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

## Measurement Uncertainty

Parameter	Uncertainty
Occupied Channel Bandwidth	5%
RF Frequency	$0.082 \times 10^{-7}$
RF output power, conducted	0.73dB
Unwanted Emission, conducted	1.6dB
AC Power Lines Conducted Emissions	2.72dB
Emissions, Radiated	9kHz - 30MHz 30MHz - 1GHz 1GHz - 18GHz 18GHz - 26.5GHz 26.5GHz - 40GHz
Temperature	1°C
Humidity	6%
Supply voltages	0.4%

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

## Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 429 7.01.

Listed by Innovation, Science and Economic Development Canada (ISED), the Registration Number is 5077A.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in an engineering mode, which was provided by manufacturer.

For 5150-5250MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 802.11a/n20/ac20/ax20 mode: channel 36, 40, 48 were tested;

For 802.11n40/ac40/ax40 mode: channel 38, 46 were tested;

For 802.11ac80/ax80 mode, channel 42 was tested.

For 5725-5850MHz Band, 8 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785
151	5755	159	5795
153	5765	161	5805
155	5775	165	5825

For 802.11a/n20/ac20/ax20 mode: channel 149, 157, 165 were tested;

For 802.11n40/ac40/ax40 mode: channel 151, 159 were tested;

For 802.11ac80/ax80 mode, channel 155 was tested.

## EUT Exercise Software

“TeraTerm”\* exercise software was used. The software and power level was provided by the applicant.

The worst case was performed under:

U-NII	Mode	Data rate	Power Level*		
			Low Channel	Middle Channel	High Channel
5150 – 5250MHz	802.11a	6Mbps	15	15	15
	802.11n-HT20	MCS0	15	15	15
	802.11n-HT40	MCS0	15	/	15
	802.11AC-VHT20	MCS0	15	15	15
	802.11AC-VHT40	MCS0	15	/	15
	802.11AC-VHT80	MCS0	/	15	/
	802.11a	6Mbps	Default	Default	Default
5725 – 5850MHz	802.11n-HT20	MCS0	Default	Default	Default
	802.11n-HT40	MCS0	Default	/	Default
	802.11AC-VHT20	MCS0	Default	Default	Default
	802.11AC-VHT40	MCS0	Default	/	Default
	802.11AC-VHT80	MCS0	/	Default	/

U-NII	Mode	Tone	RU	Power Level*		
				Low Channel	Middle Channel	High Channel
5150 – 5250MHz	802.11AX-HE20	26	0	15	15	15
			8	15	15	15
		52	37	15	15	15
			40	15	15	15
		106	53	15	15	15
			54	15	15	15
		242	61	15	15	15
	802.11AX-HE40	26	0	15	/	15
			17	15	/	15
		52	37	15	/	15
			44	15	/	15
		106	53	15	/	15
			56	15	/	15
		242	61	15	/	15
			62	15	/	15
	802.11AX-HE80	484	65	15	/	15
		26	0	/	14	/
			36	/	14	/
		52	37	/	14	/
			52	/	14	/
		106	53	/	14	/
			60	/	14	/
		242	61	/	14	/
			64	/	14	/
		484	65	/	14	/
			66	/	14	/
		996	67	/	14	/

U-NII	Mode	Tone	RU	Power Level*		
				Low Channel	Middle Channel	High Channel
5725 – 5850MHz	802.11AX-HE20	26	0	Default	Default	Default
			8	Default	Default	Default
		52	37	Default	Default	Default
			40	Default	Default	Default
		106	53	Default	Default	Default
			54	Default	Default	Default
		242	61	Default	Default	Default
	802.11AX-HE40	26	0	Default	/	Default
			17	Default	/	Default
		52	37	Default	/	Default
			44	Default	/	Default
		106	53	Default	/	Default
			56	Default	/	Default
		242	61	Default	/	Default
			62	Default	/	Default
		484	65	Default	/	Default
	802.11AX-HE80	26	0	/	Default	/
			36	/	Default	/
		52	37	/	Default	/
			52	/	Default	/
		106	53	/	Default	/
			60	/	Default	/
		242	61	/	Default	/
			64	/	Default	/
		484	65	/	Default	/
			66	/	Default	/
		996	67	/	Default	/

The worse-case data rates are determined to be as follows for each mode based upon investigations by measuring the output power and PSD across all data rated bandwidths, and modulations.

## Duty cycle

Test Result: Pass. Please refer to the Appendix.

## Equipment Modifications

No modification was made to the EUT tested.

## Support Equipment List and Details

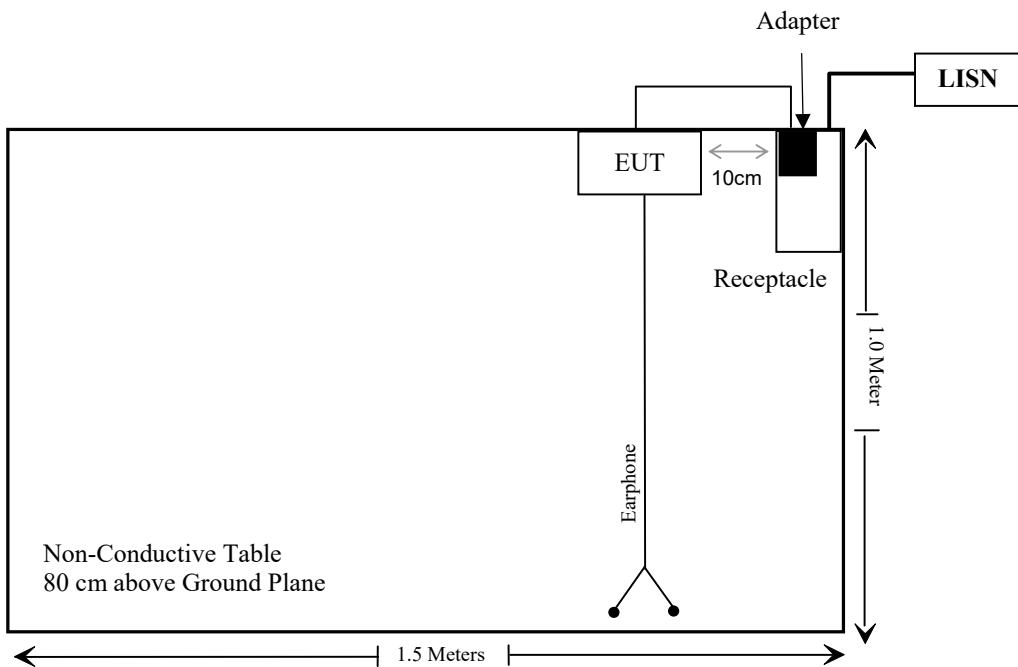
Manufacturer	Description	Model	Serial Number
Unknown	Earphone	Unknown	Unknown

## External I/O Cable

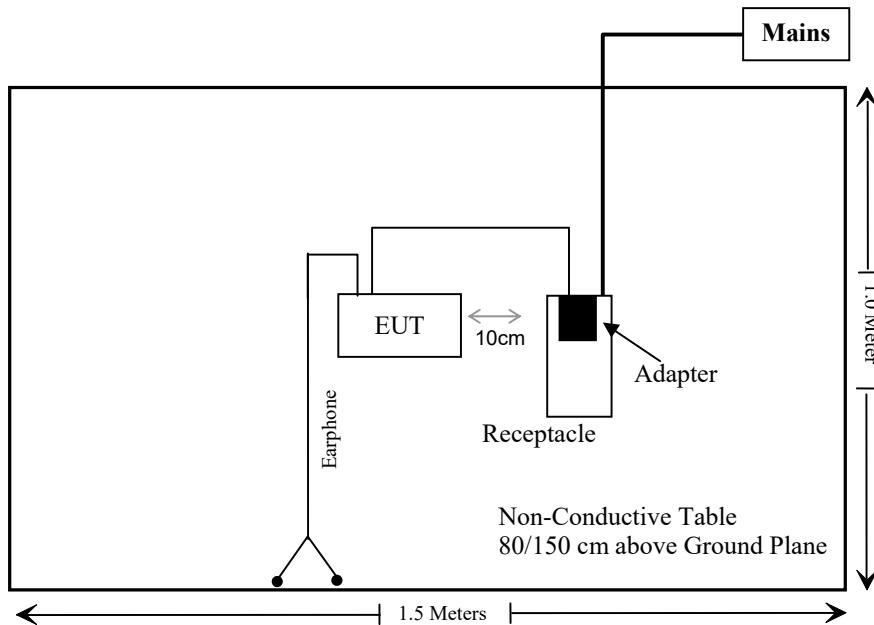
Cable Description	Length (m)	From/Port	To
Un-shielding Detachable USB Cable	1.5	EUT	Adapter

## Block Diagram of Test Setup

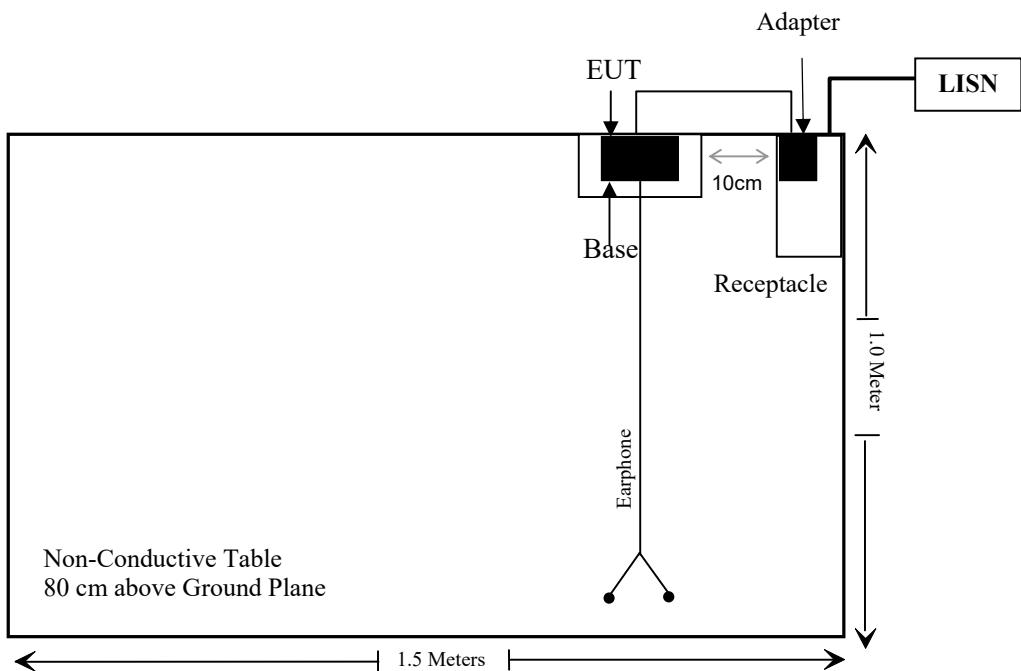
For conducted emission—direct charging:



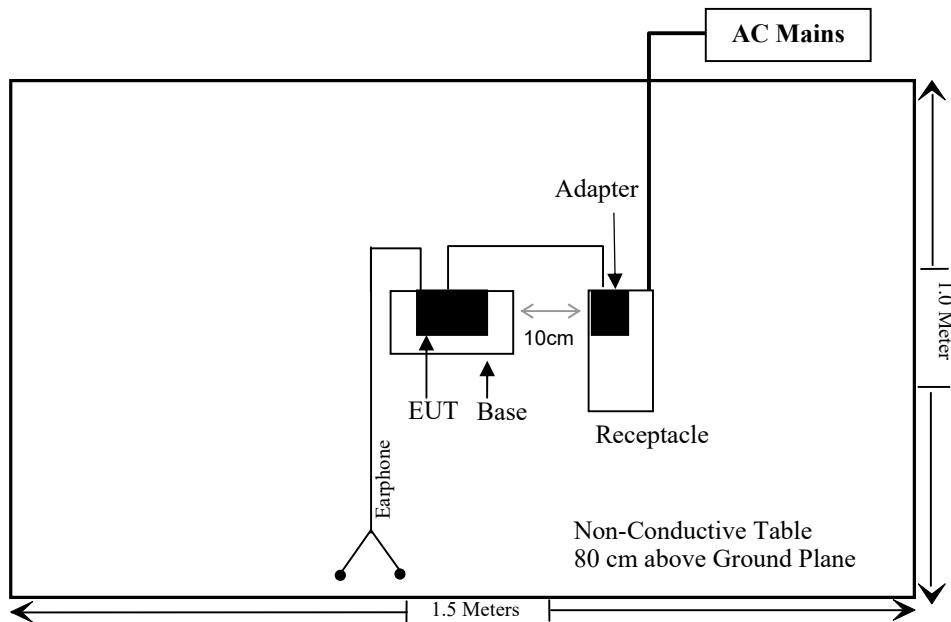
For Radiated Emissions-direct charging:



For conducted emission—base charging:



For Radiated Emissions—base charging:



## SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) (1) & §2.1093	RF Exposure	Compliant
§15.203	Antenna Requirement	Compliant
§15.407(b)(9)& §15.207(a)	Conducted Emissions	Compliant
§15.205& §15.209 &§15.407(b)	Undesirable Emission& Restricted Bands	Compliant
§15.407(a) (e)	26 dB Emission Bandwidth & 6dB Bandwidth	Compliant
§15.407(a)	Conducted Transmitter Output Power	Compliant
§15.407 (a)	Power Spectral Density	Compliant
§15.407 (h)	Transmit Power Control (TPC)	Not Applicable
§15.407 (h)	Dynamic Frequency Selection (DFS)	Not Applicable

Not Applicable: the EUT not operating within frequency range of 5250-5350MHz&5470-5725MHz.

**TEST EQUIPMENT LIST**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted emission test					
Rohde & Schwarz	EMI Test Receiver	ESCI	100784	2021/12/13	2022/12/12
Rohde & Schwarz	L.I.S.N.	ENV216	101314	2021/12/13	2022/12/12
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2021/12/13	2022/12/12
Unknown	RF Coaxial Cable	No.17	N0350	2021/12/14	2022/12/13
Conducted Emission Test Software: e3 19821b (V9)					
Radiated emission test					
Rohde & Schwarz	Test Receiver	ESR	102725	2021/12/13	2022/12/12
Rohde & Schwarz	Spectrum Analyzer	FSV40	101949	2021/12/13	2022/12/12
SONOMA INSTRUMENT	Amplifier	310 N	186131	2021/11/09	2022/11/08
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2021/11/09	2022/11/08
Quinstar	Amplifier	QLW-18405536-J0	15964001002	2021/11/11	2022/11/10
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2020/01/05	2023/01/04
Schwarzbeck	HORN ANTENNA	BBHA9170	9170-359	2020/01/05	2023/01/04
Radiated Emission Test Software: e3 19821b (V9)					
Unknown	RF Coaxial Cable	No.10	N050	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.11	N1000	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.12	N040	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.13	N300	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.14	N800	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.15	N600	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.16	N650	2021/12/14	2022/12/13
CD	Band Reject Filter	BRM-5.15/5.35g-45	075	2021/12/14	2022/12/13
CD	Band Reject Filter	BRM-5.725/5.875G-45	065	2021/12/14	2022/12/13

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF conducted test					
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101590	2022/01/19	2023/01/18
Tonscend	RF Control Unit	JS0806-2	19G8060182	2021/10/26	2022/10/25
Unknown	RF Cable	Unknown	1	Each time	/

\* **Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## **FCC §1.1307 (b) (1) & §2.1093 – RF EXPOSURE**

### **Applicable Standard**

According to FCC §2.1093 and §1.1307(b) (1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

### **Measurement Result**

Please refer to SAR test report: SZNS220815-37077E-SA.

## FCC §15.203 – ANTENNA REQUIREMENT

### Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section § 15.203 of the rules. § 15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.407 (a), if the transmitting antennas of directional gain greater than 6dBi are used, the transmit power and power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### Antenna Connector Construction

The EUT has one internal antenna arrangement for 5G Wi-Fi which were permanently attached. Please refer to the EUT photos.

Type	Antenna Gain	Impedance	Frequency Range
FPC	2.0dBi	50 Ω	5150-5850MHz

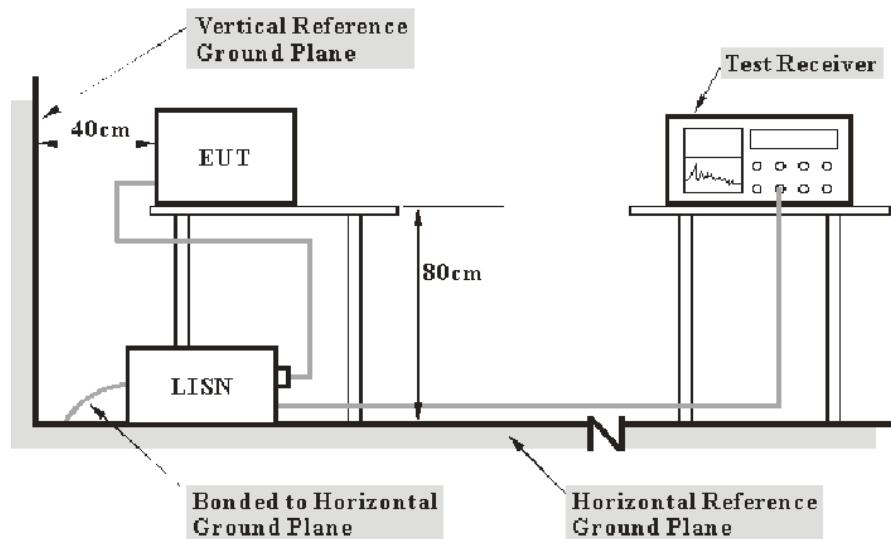
**Result:** Compliant.

## FCC §15.407 (b) (6) §15.207 (a) – CONDUCTED EMISSIONS

### Applicable Standard

FCC §15.207, §15.407(b) (6)

### EUT Setup



- Note: 1. Support units were connected to second LISN.  
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

### Test Procedure

During the conducted emission test, the adapter was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and Ave.verage detection mode.

## Corrected Factor & Margin Calculation

The Transd factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

$$\text{Transd Factor} = \text{LISN VDF} + \text{Cable Loss}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

$$\begin{aligned}\text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

## Test Data

### Environmental Conditions

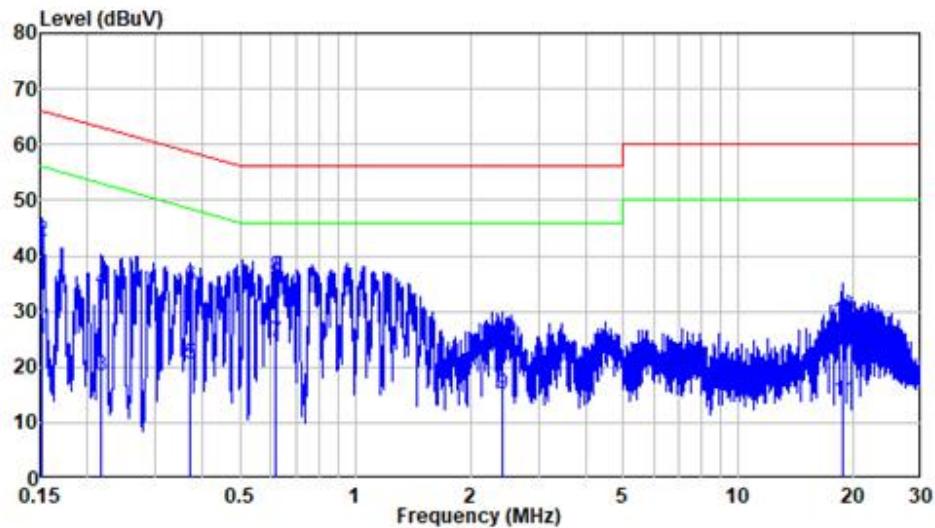
<b>Temperature:</b>	24~25 °C
<b>Relative Humidity:</b>	41~42 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Jason from 2022-08-23 to 2022-09-28.*

*EUT operation mode: Transmitting (worst case is 802.11a, 5180MHz)*

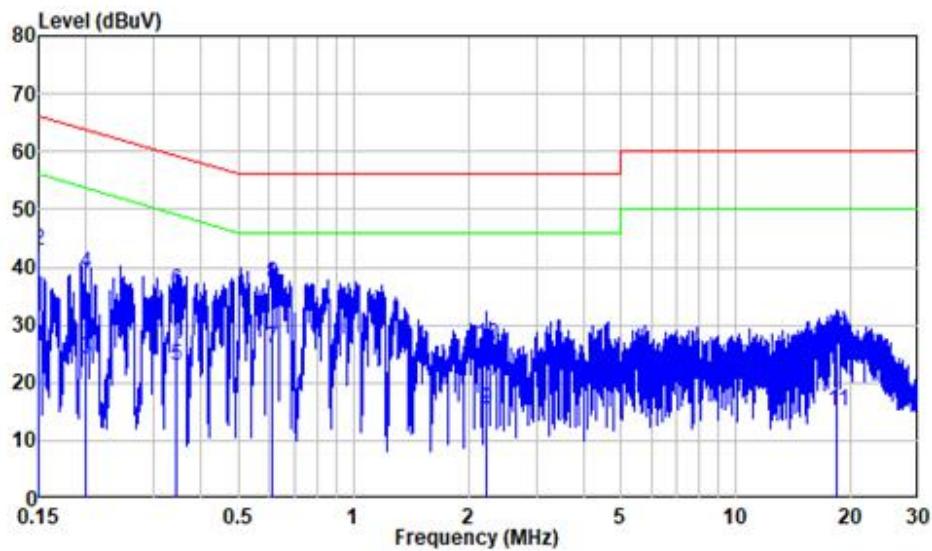
For adapter AS1201A-0502000USL:

AC 120V/60 Hz, Line



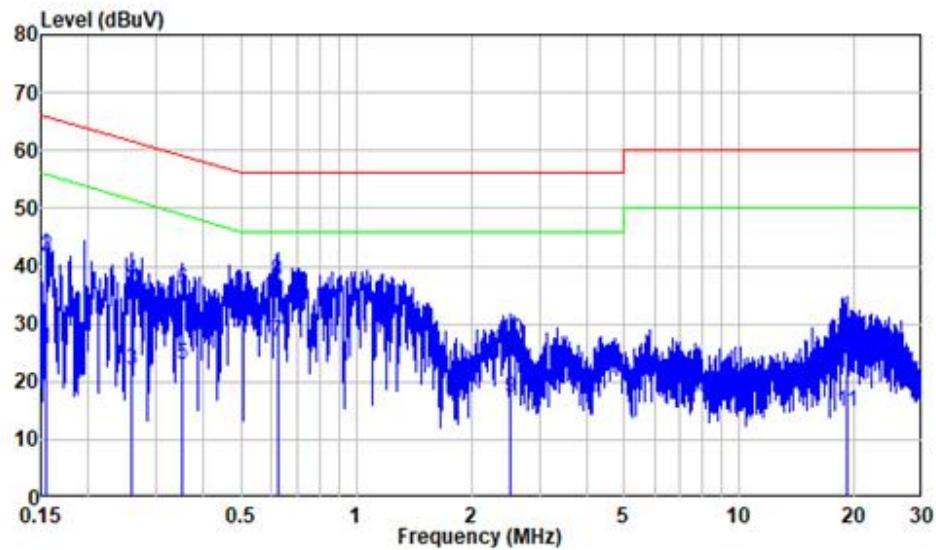
Site : Shielding Room  
Condition: Line  
Job No. : SZNS220815-37077E-RF  
Mode : Charging + 5G WIFI Transmitting  
Power : AC 120V 60Hz  
Note : Desktop Charging

	Freq	Factor	Read Level	Limit Level	Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.152	9.80	15.32	25.12	55.88	-30.76	Average
2	0.152	9.80	32.84	42.64	65.88	-23.24	QP
3	0.218	9.80	8.61	18.41	52.91	-34.50	Average
4	0.218	9.80	24.12	33.92	62.91	-28.99	QP
5	0.369	9.80	10.81	20.61	48.52	-27.91	Average
6	0.369	9.80	24.56	34.36	58.52	-24.16	QP
7	0.618	9.81	14.54	24.35	46.00	-21.65	Average
8	0.618	9.81	26.29	36.10	56.00	-19.90	QP
9	2.409	9.82	5.17	14.99	46.00	-31.01	Average
10	2.409	9.82	15.38	25.20	56.00	-30.80	QP
11	18.783	9.99	3.75	13.74	50.00	-36.26	Average
12	18.783	9.99	18.17	28.16	60.00	-31.84	QP

**AC 120V/60 Hz, Neutral**

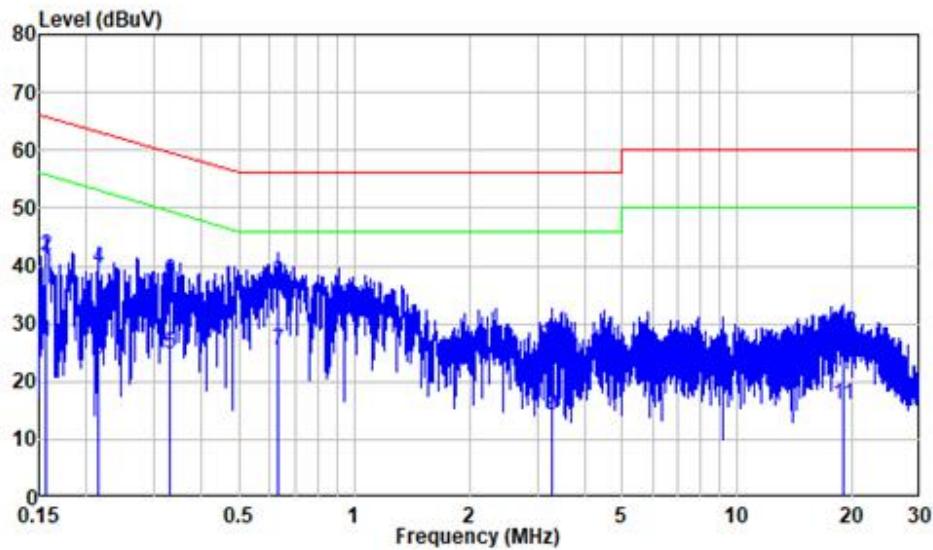
Site : Shielding Room  
Condition: Neutral  
Job No. : SZNS220815-37077E-RF  
Mode : Charging + 5G WIFI Transmitting  
Power : AC 120V 60Hz  
Note : Desktop Charging

Freq	Factor	Read		Limit Line	Over Limit	Remark
		MHz	dB	dBuV	dBuV	
1	0.151	9.80	16.35	26.15	55.97	-29.82 Average
2	0.151	9.80	33.03	42.83	65.97	-23.14 QP
3	0.200	9.80	14.33	24.13	53.61	-29.48 Average
4	0.200	9.80	29.09	38.89	63.61	-24.72 QP
5	0.345	9.80	13.04	22.84	49.08	-26.24 Average
6	0.345	9.80	26.16	35.96	59.08	-23.12 QP
7	0.610	9.81	16.23	26.04	46.00	-19.96 Average
8	0.610	9.81	27.32	37.13	56.00	-18.87 QP
9	2.234	9.82	5.63	15.45	46.00	-30.55 Average
10	2.234	9.82	16.74	26.56	56.00	-29.44 QP
11	18.365	10.08	4.93	15.01	50.00	-34.99 Average
12	18.365	10.08	17.48	27.56	60.00	-32.44 QP

**AC 120V/60 Hz, Line**

Site : Shielding Room  
Condition: Line  
Job No. : SZNS220815-37077E-RF  
Mode : Charging + 5G WIFI Transmitting  
Power : AC 120V 60Hz  
Note : Direct Charging

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB	dBuV	dBuV		
1	0.155	9.80	15.87	25.67	55.72	-30.05	Average
2	0.155	9.80	31.73	41.53	65.72	-24.19	QP
3	0.258	9.80	12.22	22.02	51.48	-29.46	Average
4	0.258	9.80	27.63	37.43	61.48	-24.05	QP
5	0.350	9.80	13.29	23.09	48.96	-25.87	Average
6	0.350	9.80	26.00	35.80	58.96	-23.16	QP
7	0.622	9.81	17.13	26.94	46.00	-19.06	Average
8	0.622	9.81	27.71	37.52	56.00	-18.48	QP
9	2.533	9.83	7.33	17.16	46.00	-28.84	Average
10	2.533	9.83	17.27	27.10	56.00	-28.90	QP
11	19.034	9.99	4.65	14.64	50.00	-35.36	Average
12	19.034	9.99	17.83	27.82	60.00	-32.18	QP

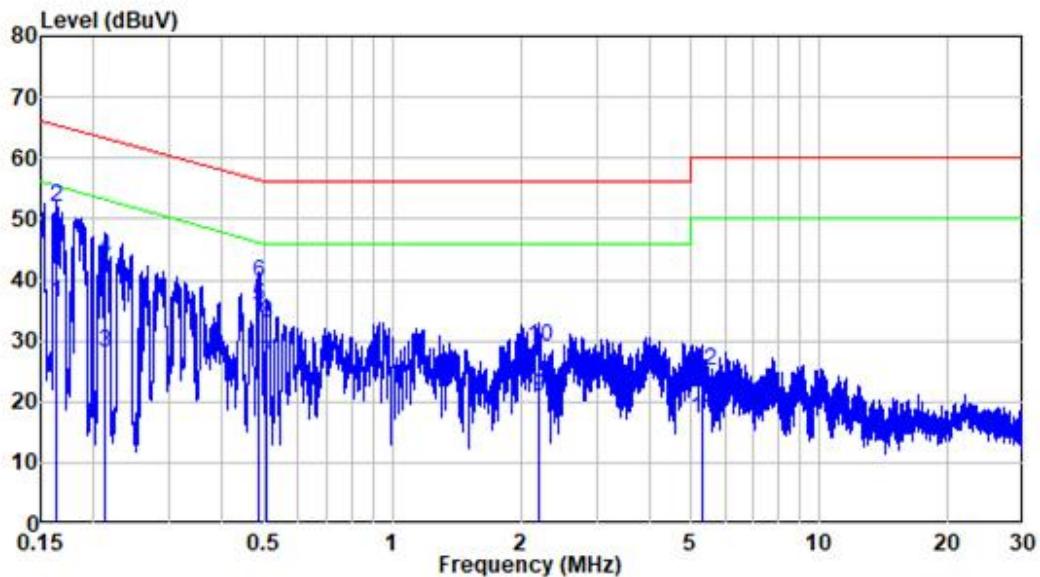
**AC 120V/60 Hz, Neutral**

Site : Shielding Room  
Condition: Neutral  
Job No. : SZNS220815-37077E-RF  
Mode : Charging + 5G WIFI Transmitting  
Power : AC 120V 60Hz  
Note : Direct Charging

Freq	Factor	Read		Limit Line	Over Limit	Remark
		MHz	dB	dBuV	dBuV	
1	0.157	9.80	17.20	27.00	55.64	-28.64 Average
2	0.157	9.80	31.95	41.75	65.64	-23.89 QP
3	0.214	9.80	14.02	23.82	53.05	-29.23 Average
4	0.214	9.80	29.60	39.40	63.05	-23.65 QP
5	0.329	9.80	15.07	24.87	49.48	-24.61 Average
6	0.329	9.80	27.76	37.56	59.48	-21.92 QP
7	0.634	9.81	15.41	25.22	46.00	-20.78 Average
8	0.634	9.81	27.37	37.18	56.00	-18.82 QP
9	3.284	9.83	4.28	14.11	46.00	-31.89 Average
10	3.284	9.83	16.74	26.57	56.00	-29.43 QP
11	18.833	10.09	5.95	16.04	50.00	-33.96 Average
12	18.833	10.09	18.15	28.24	60.00	-31.76 QP

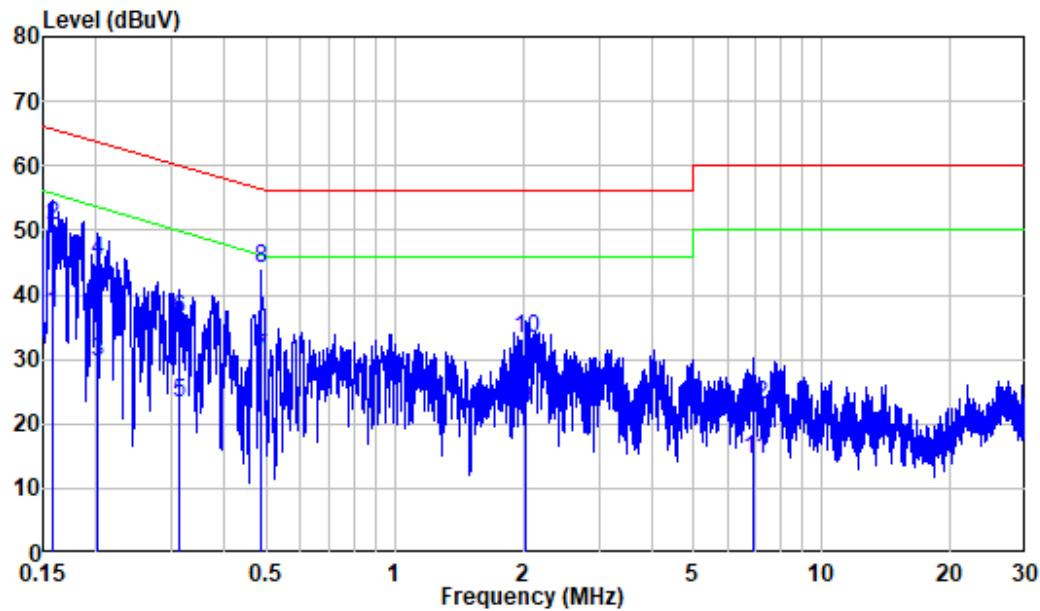
For adapter GQ12-050200-AU:

AC 120V/60 Hz, Line



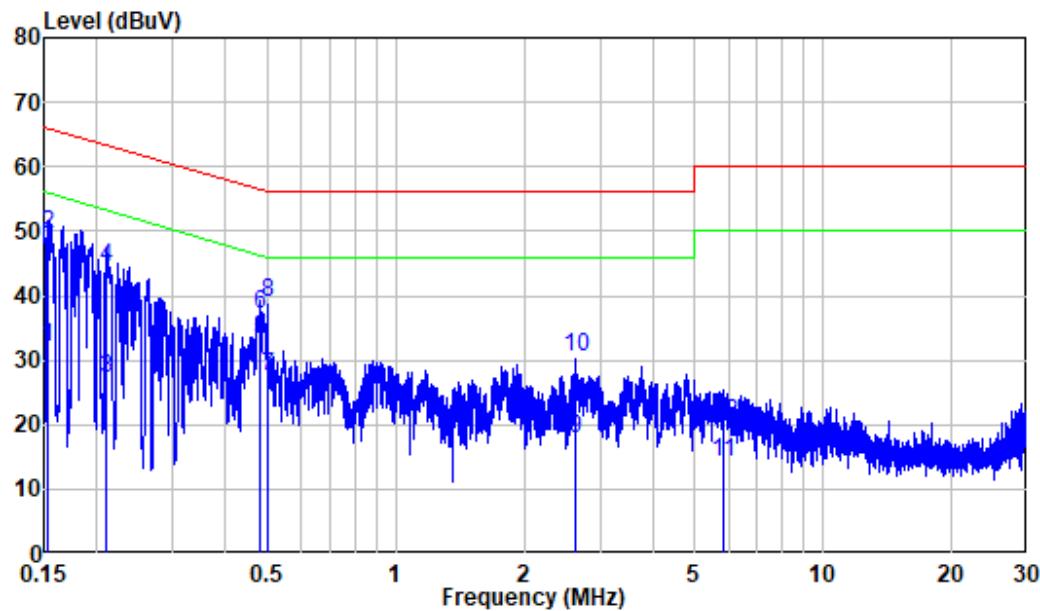
Site : Shielding Room  
Condition: Line  
Job No. : SZNS220815-37077E-RF  
Mode : 5G WIFI  
Power : AC 120V 60Hz  
Note : Desktop Charging

Freq	Factor	Read		Limit Line	Over Limit	Remark
		MHz	dB	dBuV	dBuV	
1	0.163	9.80	26.28	36.08	55.31	-19.23 Average
2	0.163	9.80	42.07	51.87	65.31	-13.44 QP
3	0.213	9.80	18.41	28.21	53.09	-24.88 Average
4	0.213	9.80	33.78	43.58	63.09	-19.51 QP
5	0.484	9.80	25.72	35.52	46.26	-10.74 Average
6	0.484	9.80	29.86	39.66	56.26	-16.60 QP
7	0.508	9.80	16.35	26.15	46.00	-19.85 Average
8	0.508	9.80	23.25	33.05	56.00	-22.95 QP
9	2.201	9.82	11.06	20.88	46.00	-25.12 Average
10	2.201	9.82	19.14	28.96	56.00	-27.04 QP
11	5.298	9.85	7.30	17.15	50.00	-32.85 Average
12	5.298	9.85	15.16	25.01	60.00	-34.99 QP

**AC 120V/60 Hz, Neutral**

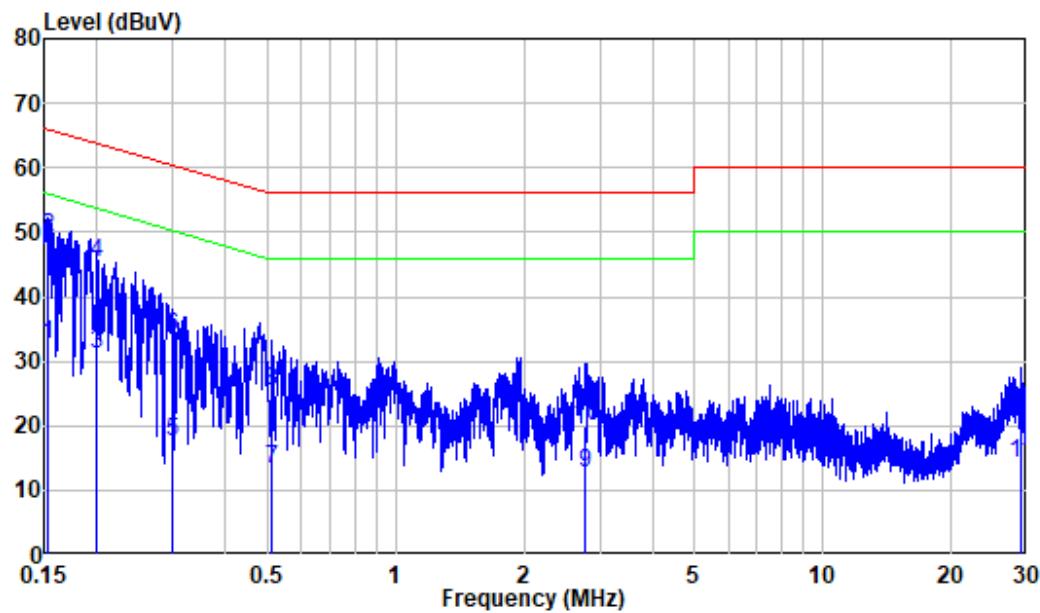
Site : Shielding Room  
Condition: Neutral  
Job No. : SZNS220815-37077E-RF  
Mode : 5G WIFI  
Power : AC 120V 60Hz  
Note : Desktop Charging

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	0.158	9.80	27.32	37.12	55.57 -18.45 Average
2	0.158	9.80	40.87	50.67	65.57 -14.90 QP
3	0.201	9.80	19.93	29.73	53.56 -23.83 Average
4	0.201	9.80	35.56	45.36	63.56 -18.20 QP
5	0.313	9.80	13.40	23.20	49.88 -26.68 Average
6	0.313	9.80	26.42	36.22	59.88 -23.66 QP
7	0.487	9.80	20.29	30.09	46.22 -16.13 Average
8	0.487	9.80	34.19	43.99	56.22 -12.23 QP
9	2.020	9.82	12.61	22.43	46.00 -23.57 Average
10	2.020	9.82	23.43	33.25	56.00 -22.75 QP
11	6.932	9.97	4.48	14.45	50.00 -35.55 Average
12	6.932	9.97	12.88	22.85	60.00 -37.15 QP

**AC 120V/60 Hz, Line**

Site : Shielding Room  
Condition: Line  
Job No. : SZNS220815-37077E-RF  
Mode : 5G WIFI  
Power : AC 120V 60Hz  
Note : Direct Charging

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	0.153	9.80	22.29	32.09	55.85 -23.76 Average
2	0.153	9.80	39.70	49.50	65.85 -16.35 QP
3	0.211	9.80	17.24	27.04	53.18 -26.14 Average
4	0.211	9.80	34.56	44.36	63.18 -18.82 QP
5	0.480	9.80	23.30	33.10	46.34 -13.24 Average
6	0.480	9.80	27.46	37.26	56.34 -19.08 QP
7	0.500	9.80	17.72	27.52	46.00 -18.48 Average
8	0.500	9.80	29.08	38.88	56.00 -17.12 QP
9	2.620	9.83	8.08	17.91	46.00 -28.09 Average
10	2.620	9.83	20.53	30.36	56.00 -25.64 QP
11	5.847	9.86	4.31	14.17	50.00 -35.83 Average
12	5.847	9.86	10.34	20.20	60.00 -39.80 QP

**AC 120V/60 Hz, Neutral**

Site : Shielding Room  
Condition: Neutral  
Job No. : SZNS220815-37077E-RF  
Mode : 5G WIFI  
Power : AC 120V 60Hz  
Note : Direct Charging

Freq	Factor	Read	Limit	Over	Remark	
		Level	Level	Line		
		MHz	dB	dBuV	dB	
1	0.153	9.80	22.71	32.51	55.85	-23.34 Average
2	0.153	9.80	39.28	49.08	65.85	-16.77 QP
3	0.200	9.80	21.42	31.22	53.62	-22.40 Average
4	0.200	9.80	35.33	45.13	63.62	-18.49 QP
5	0.301	9.80	7.83	17.63	50.21	-32.58 Average
6	0.301	9.80	24.08	33.88	60.21	-26.33 QP
7	0.511	9.81	3.39	13.20	46.00	-32.80 Average
8	0.511	9.81	15.63	25.44	56.00	-30.56 QP
9	2.783	9.83	2.70	12.53	46.00	-33.47 Average
10	2.783	9.83	10.10	19.93	56.00	-36.07 QP
11	28.946	10.19	3.97	14.16	50.00	-35.84 Average
12	28.946	10.19	11.26	21.45	60.00	-38.55 QP

## §15.205 & §15.209 & §15.407(B) – UNDESIRABLE EMISSION

### Applicable Standard

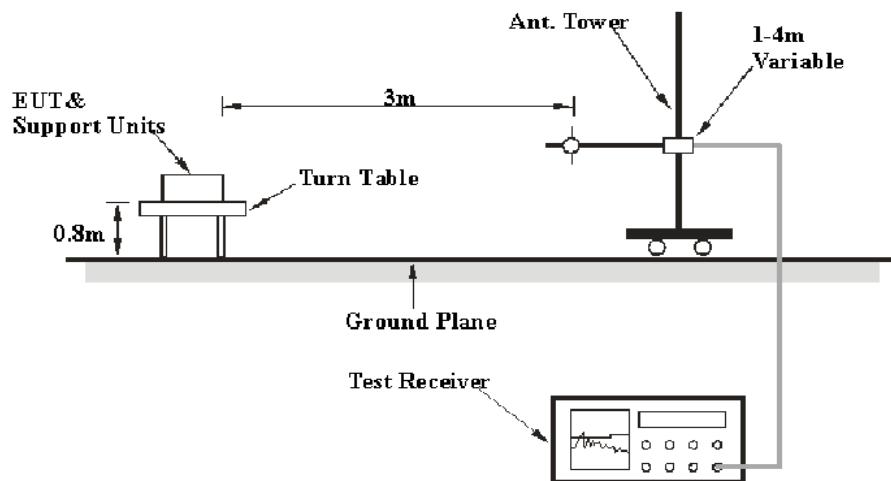
FCC §15.407 (b); §15.209; §15.205;

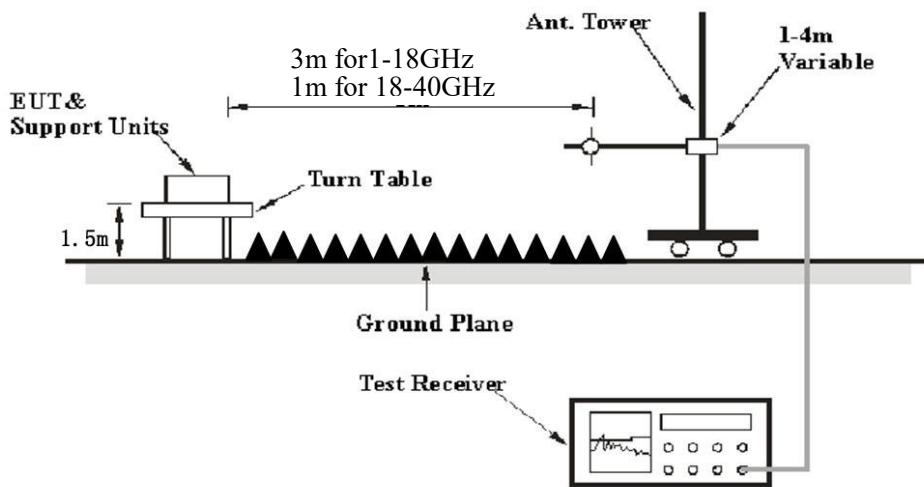
- (b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
  - (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
  - (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
  - (4) For transmitters operating in the 5.725-5.85 GHz band:
    - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

### EUT Setup

#### Below 1 GHz:



**Above 1 GHz:**

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC 15.209 and FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

**EMI Test Receiver & Spectrum Analyzer Setup**

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	PK
	1MHz	10 Hz <sup>Note 1</sup>	/	Ave.erage
	1MHz	>1/T <sup>Note 2</sup>	/	Ave.erage

Note 1: when duty cycle is no less than 98%

Note 2: when duty cycle is less than 98%

**Test Procedure****Radiated Spurious Emission**

During the radiated emission test, the adapter was connected to the AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all the installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Ave.erage detection modes for frequencies above 1GHz.

According to ANSI C63.10-2013,9.4: For field strength measurements made at other than the distance at which the applicable limit is specified, extrapolate the measured field strength to the field strength at the distance specified by the limit using an inverse distance correction factor (20 dB/decade of distance). In some cases, a different distance correction factor may be required;

$$E_{\text{SpecLimit}} = E_{\text{Meas}} + 20 \log \left( \frac{d_{\text{Meas}}}{d_{\text{SpecLimit}}} \right)$$

where

- $E_{\text{SpecLimit}}$  is the field strength of the emission at the distance specified by the limit, in  $\text{dB}\mu\text{V/m}$
- $E_{\text{Meas}}$  is the field strength of the emission at the measurement distance, in  $\text{dB}\mu\text{V/m}$
- $d_{\text{Meas}}$  is the measurement distance, in m
- $d_{\text{SpecLimit}}$  is the distance specified by the limit, in m

So the extrapolation factor of 1m is  $20 * \log(1/3) = -9.5$  dB, for 18-40GHz range, the limit of 1m distance was added by 9.5dB from limit of 3m to compared with the result measurement at 1m distance.

## Factor & Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “Over Limit/Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

$$\begin{aligned} \text{Over Limit/Margin} &= \text{Level} / \text{Corrected Amplitude} - \text{Limit} \\ \text{Level} / \text{Corrected Amplitude} &= \text{Read Level} + \text{Factor} \end{aligned}$$

## Test Data

### Environmental Conditions

<b>Temperature:</b>	25~25.6 °C
<b>Relative Humidity:</b>	50~62 %
<b>ATM Pressure:</b>	101.0 kPa

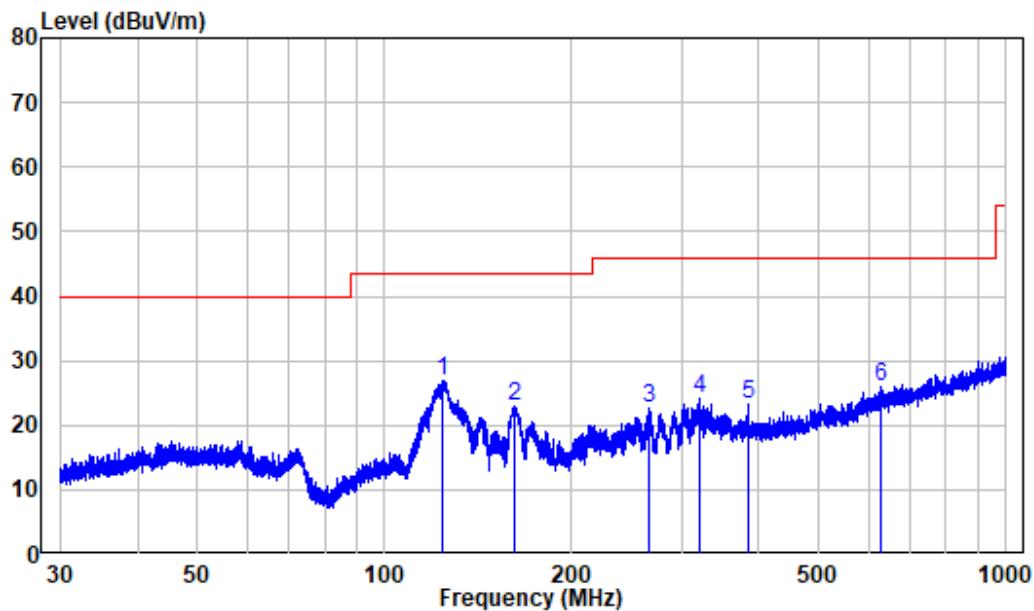
*The testing was performed by Level from 2022-08-22 to 2022-09-27 for below 1GHz ,by Jeff Jiang and Zenos Qiao on 2022-09-16 for above 1GHz.*

*EUT operation mode: Transmitting (Pre-scan in the X,Y and Z axes of orientation, the worst case X-axes of orientation was recorded)*

**30 MHz – 1 GHz:** (worst case is 802.11a, 5180MHz)

Note: When the result of Peak less than the limit of QP by more than 6dB, just the peak value was recorded.

For adapter AS1201A-0502000USL:

**Horizontal:**

Site : chamber

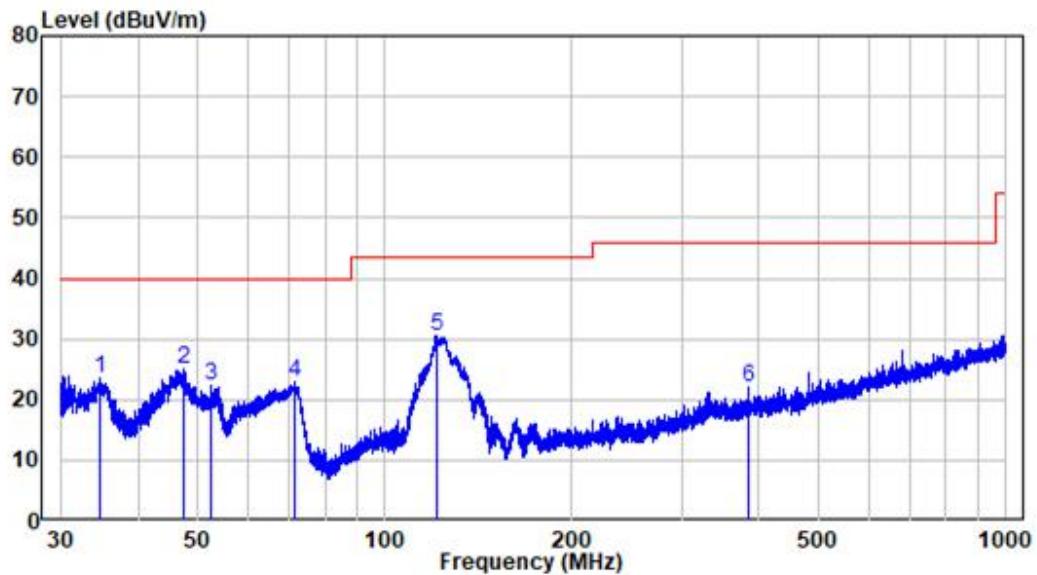
Condition: 3m HORIZONTAL

Job No. : SZNS220815-37077E-RF

Test Mode: Charging+5G WIFI Transmitting

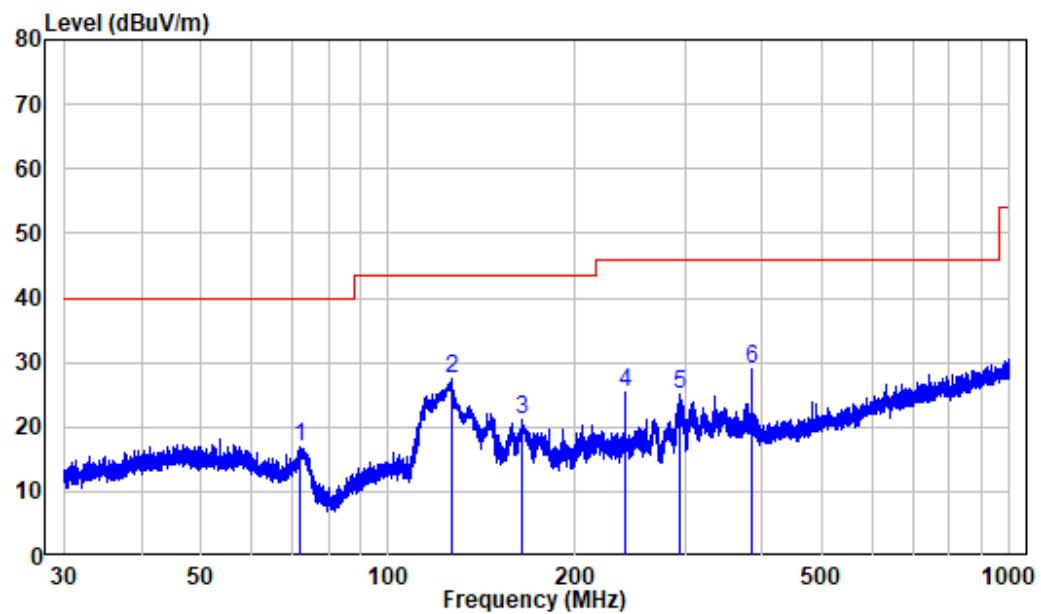
Note : Desktop Charging

	Freq	Factor	Read Level	Limit Level	Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	124.024	-14.21	41.20	26.99	43.50	-16.51	Peak
2	161.758	-14.28	37.36	23.08	43.50	-20.42	Peak
3	265.792	-10.42	33.02	22.60	46.00	-23.40	Peak
4	321.061	-8.41	32.43	24.02	46.00	-21.98	Peak
5	384.100	-7.08	30.27	23.19	46.00	-22.81	Peak
6	627.274	-2.23	28.19	25.96	46.00	-20.04	Peak

**Vertical**

Site : chamber  
Condition: 3m VERTICAL  
Job No. : SZNS220815-37077E-RF  
Test Mode: Charging+5G WIFI Transmitting  
Note : Desktop Charging

	Freq	Read Factor	Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	34.760	-11.61	35.20	23.59	40.00	-16.41	Peak
2	47.513	-10.00	35.18	25.18	40.00	-14.82	Peak
3	52.598	-10.09	32.48	22.39	40.00	-17.61	Peak
4	71.675	-15.48	38.36	22.88	40.00	-17.12	Peak
5	120.805	-13.69	44.15	30.46	43.50	-13.04	Peak
6	384.100	-7.08	29.11	22.03	46.00	-23.97	Peak

**Horizontal:**

Site : chamber

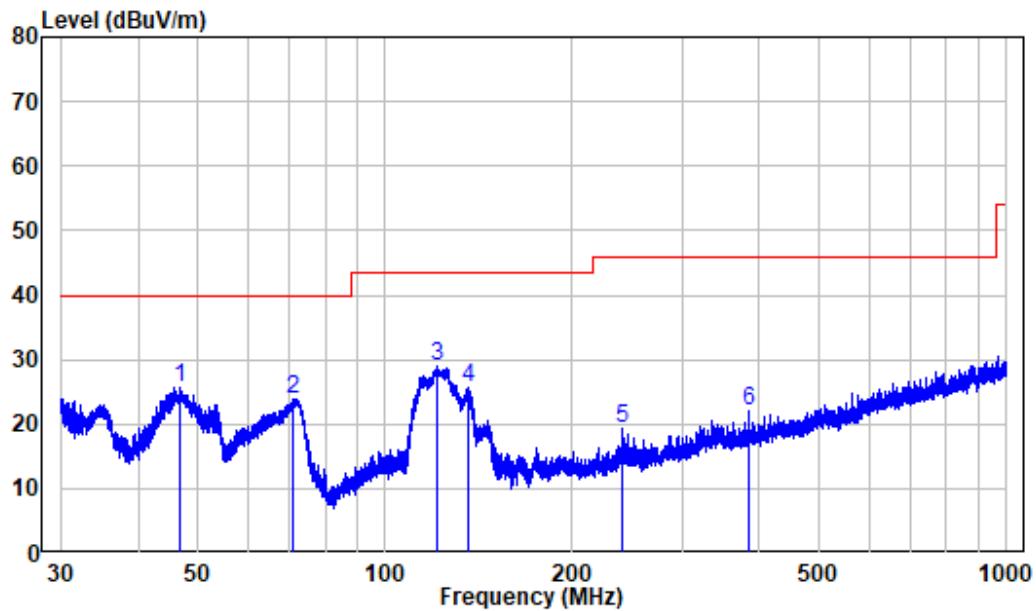
Condition: 3m HORIZONTAL

Job No. : SZNS220815-37077E-RF

Test Mode: Charging+5G WIFI Transmitting

Note : Direct Charging

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	72.179	-15.65	32.53	16.88	40.00 -23.12 Peak
2	126.218	-14.43	41.77	27.34	43.50 -16.16 Peak
3	164.186	-14.25	35.44	21.19	43.50 -22.31 Peak
4	239.987	-10.91	36.16	25.25	46.00 -20.75 Peak
5	295.276	-9.27	34.31	25.04	46.00 -20.96 Peak
6	384.100	-7.08	36.11	29.03	46.00 -16.97 Peak

**Vertical**

Site : chamber

Condition: 3m VERTICAL

Job No. : SZNS220815-37077E-RF

Test Mode: Charging+5G WIFI Transmitting

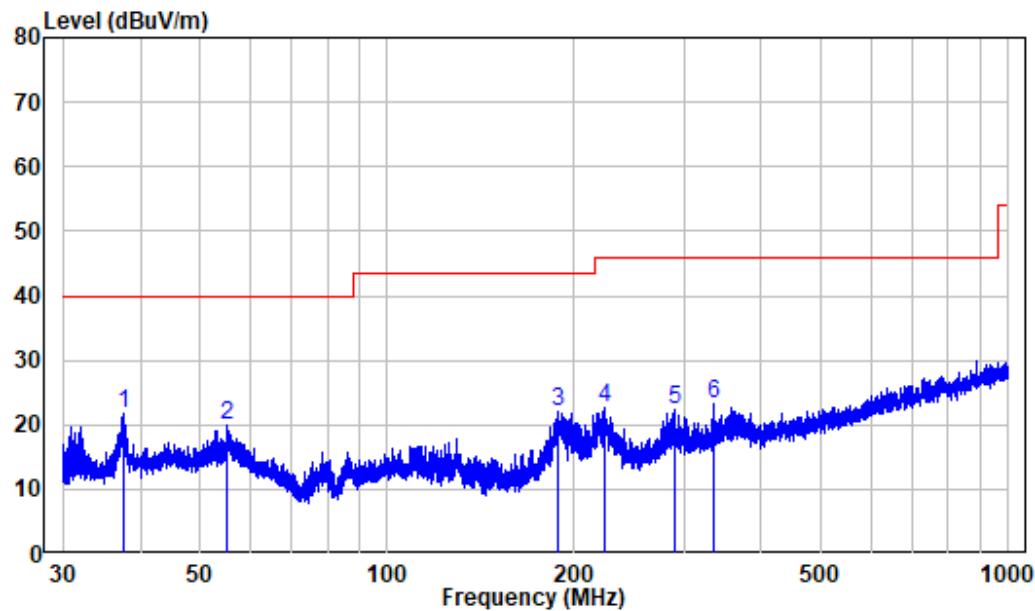
Note : Direct Charging

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	46.830	-10.00	35.65	25.65	40.00	-14.35	Peak
2	71.049	-15.22	39.14	23.92	40.00	-16.08	Peak
3	121.283	-13.79	42.71	28.92	43.50	-14.58	Peak
4	135.625	-15.05	40.81	25.76	43.50	-17.74	Peak
5	239.987	-10.91	30.08	19.17	46.00	-26.83	Peak
6	384.100	-7.08	29.18	22.10	46.00	-23.90	Peak

For adapter **GQ12-050200-AU**:

Desktop charging:

Horizontal:



Site : chamber

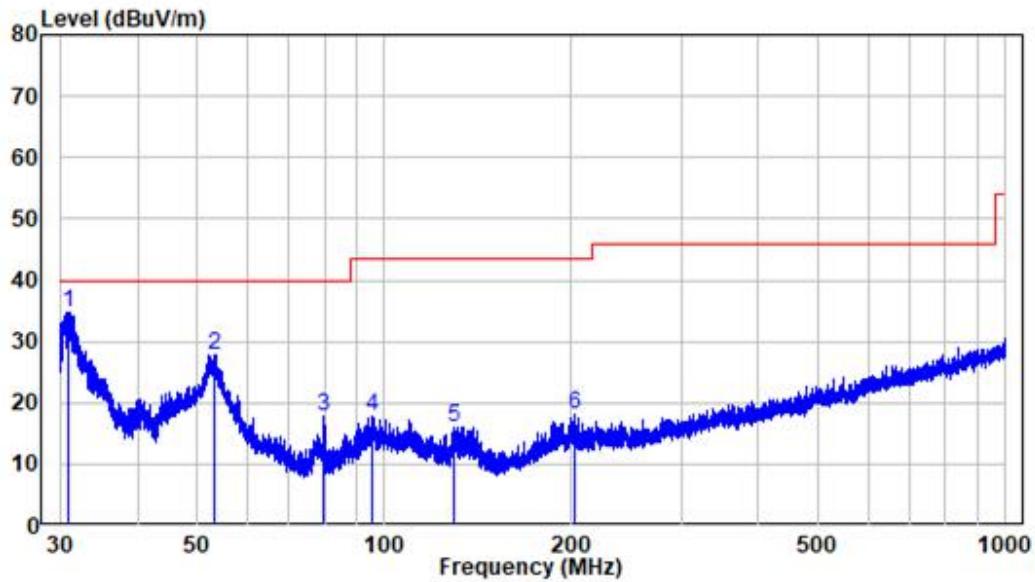
Condition: 3m HORIZONTAL

Job No. : SZNS220815-37077E-RF

Test Mode: 5G WIFI

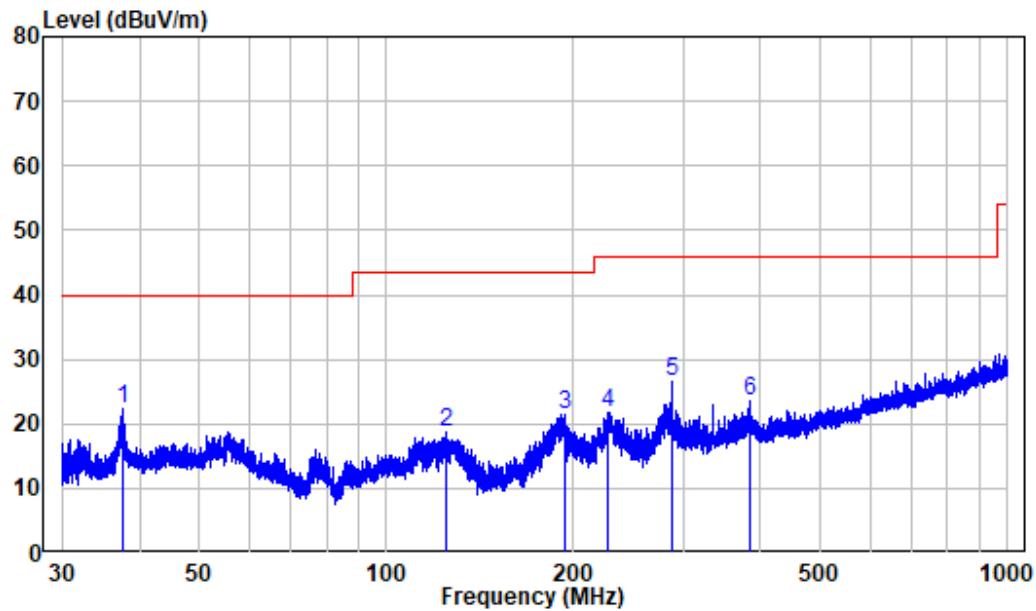
Note : Charger base

	Freq	Factor	Read Level	Limit Level	Line	Over Limit	Remark
	MHz	dB/m	dB <sub>BuV</sub>	dB <sub>BuV/m</sub>	dB <sub>BuV/m</sub>	dB	
1	37.482	-10.93	32.64	21.71	40.00	-18.29	Peak
2	55.100	-10.28	30.08	19.80	40.00	-20.20	Peak
3	188.000	-11.82	33.95	22.13	43.50	-21.37	Peak
4	224.618	-11.27	33.87	22.60	46.00	-23.40	Peak
5	289.763	-9.31	31.55	22.24	46.00	-23.76	Peak
6	336.035	-7.58	30.88	23.30	46.00	-22.70	Peak

**Vertical**

Site : chamber  
Condition: 3m VERTICAL  
Job No. : SZNS220815-37077E-RF  
Test Mode: 5G WIFI  
Note : Charger base

Freq	Factor	Read		Limit		Over Limit	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	30.975	-12.29	47.07	34.78	40.00	-5.22	Peak
2	53.295	-10.22	38.10	27.88	40.00	-12.12	Peak
3	79.975	-16.79	34.60	17.81	40.00	-22.19	Peak
4	95.762	-12.35	30.07	17.72	43.50	-25.78	Peak
5	129.695	-14.87	30.99	16.12	43.50	-27.38	Peak
6	202.544	-11.61	29.61	18.00	43.50	-25.50	Peak

**Direct charging:****Horizontal:**

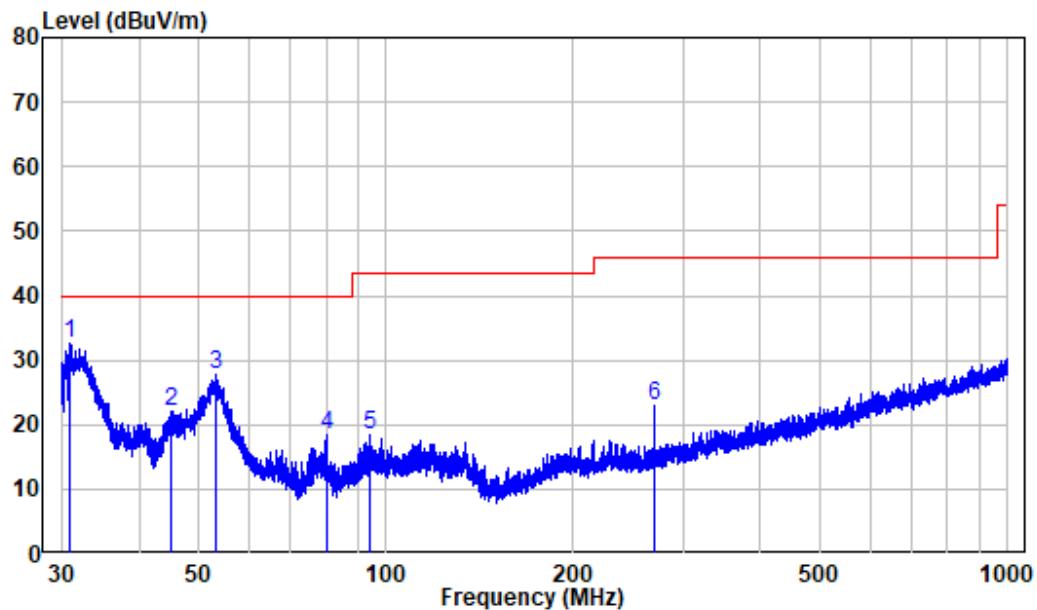
Site : chamber

Condition: 3m HORIZONTAL

Job No. : SZNS220815-37077E-RF

Test Mode: 5G WIFI

	Freq	Factor	Read	Limit	Over	Remark
			Level	Level	Line	
1	37.515	-10.90	33.23	22.33	40.00	-17.67 Peak
2	125.007	-14.31	32.99	18.68	43.50	-24.82 Peak
3	193.858	-11.31	32.81	21.50	43.50	-22.00 Peak
4	227.292	-11.19	33.02	21.83	46.00	-24.17 Peak
5	287.990	-9.36	36.03	26.67	46.00	-19.33 Peak
6	384.100	-7.08	30.65	23.57	46.00	-22.43 Peak

**Vertical**

Site : chamber

Condition: 3m VERTICAL

Job No. : SZNS220815-37077E-RF

Test Mode: 5G WIFI

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.908	-12.30	44.99	32.69	40.00	-7.31	Peak
2	45.019	-9.94	32.06	22.12	40.00	-17.88	Peak
3	53.295	-10.22	38.07	27.85	40.00	-12.15	Peak
4	80.010	-16.79	35.09	18.30	40.00	-21.70	Peak
5	94.387	-12.61	30.92	18.31	43.50	-25.19	Peak
6	270.020	-10.23	33.20	22.97	46.00	-23.03	Peak

**Above 1GHz:** (worst case is direct charging+adapter GQ12-050200-AU)

**5150-5250 MHz:**

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11a, 5180MHz									
4500	63.43	PK	289	1.9	H	-4.72	58.71	74	-15.29
4500	50.01	AV	289	1.9	H	-4.72	45.29	54	-8.71
4500	63.25	PK	167	1.3	V	-4.72	58.53	74	-15.47
4500	49.88	AV	167	1.3	V	-4.72	45.16	54	-8.84
5150	71.46	PK	104	2.1	H	-2.73	68.73	74	-5.27
5150	52.57	AV	104	2.1	H	-2.73	49.84	54	-4.16
5150	68.59	PK	191	1.8	V	-2.73	65.86	74	-8.14
5150	51.31	AV	191	1.8	V	-2.73	48.58	54	-5.42
10360	42.66	PK	125	1.3	H	8.12	50.78	68.2	-17.42
10360	42.53	PK	71	1.3	V	8.12	50.65	68.2	-17.55
802.11a, 5200MHz									
10400	42.50	PK	213	1.8	H	8.24	50.74	68.2	-17.46
10400	42.17	PK	43	1.8	V	8.24	50.41	68.2	-17.79
802.11a, 5240MHz									
5350	65.24	PK	302	1.7	H	-2.33	62.91	74	-11.09
5350	50.61	AV	302	1.7	H	-2.33	48.28	54	-5.72
5350	64.97	PK	12	1.4	V	-2.33	62.64	74	-11.36
5350	50.40	AV	12	1.4	V	-2.33	48.07	54	-5.93
5460	63.66	PK	162	2	H	-2.26	61.40	74	-12.60
5460	50.20	AV	162	2	H	-2.26	47.94	54	-6.06
5460	63.37	PK	343	1.7	V	-2.26	61.11	74	-12.89
5460	50.09	AV	343	1.7	V	-2.26	47.83	54	-6.17
10480	42.82	PK	125	1.7	H	8.56	51.38	68.2	-16.82
10480	42.38	PK	136	1.7	V	8.56	50.94	68.2	-17.26

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11n20, 5180MHz									
4500	63.21	PK	329	2.1	H	-4.72	58.49	74	-15.51
4500	49.92	AV	329	2.1	H	-4.72	45.20	54	-8.80
4500	63.07	PK	318	2.2	V	-4.72	58.35	74	-15.65
4500	51.79	AV	318	2.2	V	-4.72	47.07	54	-6.93
5150	70.41	PK	205	1.6	H	-2.73	67.68	74	-6.32
5150	52.32	AV	205	1.6	H	-2.73	49.59	54	-4.41
5150	67.65	PK	344	1.5	V	-2.73	64.92	74	-9.08
5150	51.10	AV	344	1.5	V	-2.73	48.37	54	-5.63
10360	42.64	PK	4	1.2	H	8.12	50.76	68.2	-17.44
10360	42.51	PK	5	1.2	V	8.12	50.63	68.2	-17.57
802.11n20, 5200MHz									
10400	42.50	PK	34	1.9	H	8.24	50.74	68.2	-17.46
10400	42.41	PK	263	1.9	V	8.24	50.65	68.2	-17.55
802.11n20, 5240MHz									
5350	65.16	PK	343	2.1	H	-2.33	62.83	74	-11.17
5350	50.47	AV	343	2.1	H	-2.33	48.14	54	-5.86
5350	64.90	PK	242	2	V	-2.33	62.57	74	-11.43
5350	50.34	AV	242	2	V	-2.33	48.01	54	-5.99
5460	63.64	PK	11	1.9	H	-2.26	61.38	74	-12.62
5460	50.19	AV	11	1.9	H	-2.26	47.93	54	-6.07
5460	63.50	PK	10	2	V	-2.26	61.24	74	-12.76
5460	50.06	AV	10	2	V	-2.26	47.80	54	-6.20
10480	42.21	PK	94	1.7	H	8.56	50.77	68.2	-17.43
10480	42.02	PK	62	1.7	V	8.56	50.58	68.2	-17.62

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11n40, 5190MHz									
4500	63.43	PK	248	1.6	H	-4.72	58.71	74	-15.29
4500	50.11	AV	248	1.6	H	-4.72	45.39	54	-8.61
4500	63.28	PK	324	1.5	V	-4.72	58.56	74	-15.44
4500	49.99	AV	324	1.5	V	-4.72	45.27	54	-8.73
5150	71.58	PK	353	2	H	-2.73	68.85	74	-5.15
5150	53.57	AV	353	2	H	-2.73	50.84	54	-3.16
5150	68.49	PK	273	1.4	V	-2.73	65.76	74	-8.24
5150	51.41	AV	273	1.4	V	-2.73	48.68	54	-5.32
10380	42.22	PK	278	1.9	H	8.18	50.40	68.2	-17.80
10380	42.05	PK	50	1.9	V	8.18	50.23	68.2	-17.97
802.11n40, 5230MHz									
5350	64.95	PK	160	1.2	H	-2.33	62.62	74	-11.38
5350	50.46	AV	160	1.2	H	-2.33	48.13	54	-5.87
5350	64.79	PK	258	2.1	V	-2.33	62.46	74	-11.54
5350	50.33	AV	258	2.1	V	-2.33	48.00	54	-6.00
5460	63.51	PK	275	1.6	H	-2.26	61.25	74	-12.75
5460	50.08	AV	275	1.6	H	-2.26	47.82	54	-6.18
5460	63.39	PK	74	2.2	V	-2.26	61.13	74	-12.87
5460	49.95	AV	74	2.2	V	-2.26	47.69	54	-6.31
10460	42.02	PK	354	1.7	H	8.47	50.49	68.2	-17.71
10460	41.83	PK	293	1.7	V	8.47	50.30	68.2	-17.90

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11ac20, 5180MHz									
4500	63.49	PK	264	1.5	H	-4.72	58.77	74	-15.23
4500	50.25	AV	264	1.5	H	-4.72	45.53	54	-8.47
4500	63.34	PK	7	2.5	V	-4.72	58.62	74	-15.38
4500	50.12	AV	7	2.5	V	-4.72	45.40	54	-8.60
5150	71.78	PK	11	2.3	H	-2.73	69.05	74	-4.95
5150	52.84	AV	11	2.3	H	-2.73	50.11	54	-3.89
5150	68.47	PK	132	1.9	V	-2.73	65.74	74	-8.26
5150	51.30	AV	132	1.9	V	-2.73	48.57	54	-5.43
10360	42.62	PK	277	2.4	H	8.12	50.74	68.2	-17.46
10360	42.49	PK	338	2.4	V	8.12	50.61	68.2	-17.59
802.11ac20, 5200MHz									
10400	42.46	PK	252	2	H	8.24	50.7	68.2	-17.50
10400	42.33	PK	313	2	V	8.24	50.57	68.2	-17.63
802.11ac20, 5240MHz									
5350	65.30	PK	40	2.2	H	-2.33	62.97	74	-11.03
5350	50.61	AV	40	2.2	H	-2.33	48.28	54	-5.72
5350	65.04	PK	263	2.2	V	-2.33	62.71	74	-11.29
5350	50.43	AV	263	2.2	V	-2.33	48.10	54	-5.90
5460	63.77	PK	348	2.4	H	-2.26	61.51	74	-12.49
5460	50.26	AV	348	2.4	H	-2.26	48.00	54	-6.00
5460	63.58	PK	242	1.3	V	-2.26	61.32	74	-12.68
5460	50.14	AV	242	1.3	V	-2.26	47.88	54	-6.12
10480	42.31	PK	224	1.7	H	8.56	50.87	68.2	-17.33
10480	42.08	PK	254	1.7	V	8.56	50.64	68.2	-17.56

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11ac40, 5190MHz									
4500	63.42	PK	214	2.4	H	-4.72	58.70	74	-15.30
4500	50.21	AV	214	2.4	H	-4.72	45.49	54	-8.51
4500	63.28	PK	102	1.2	V	-4.72	58.56	74	-15.44
4500	50.09	AV	102	1.2	V	-4.72	45.37	54	-8.63
5150	71.07	PK	299	1.8	H	-2.73	68.34	74	-5.66
5150	53.64	AV	299	1.8	H	-2.73	50.91	54	-3.09
5150	68.41	PK	337	1.3	V	-2.73	65.68	74	-8.32
5150	51.46	AV	337	1.3	V	-2.73	48.73	54	-5.27
10380	42.28	PK	357	1.2	H	8.18	50.46	68.2	-17.74
10380	42.16	PK	133	1.2	V	8.18	50.34	68.2	-17.86
802.11ac40, 5230MHz									
5350	65.13	PK	344	2.2	H	-2.33	62.80	74	-11.20
5350	50.60	AV	344	2.2	H	-2.33	48.27	54	-5.73
5350	64.97	PK	92	2.2	V	-2.33	62.64	74	-11.36
5350	50.46	AV	92	2.2	V	-2.33	48.13	54	-5.87
5460	63.58	PK	91	2.2	H	-2.26	61.32	74	-12.68
5460	50.20	AV	91	2.2	H	-2.26	47.94	54	-6.06
5460	63.45	PK	29	1.7	V	-2.26	61.19	74	-12.81
5460	50.08	AV	29	1.7	V	-2.26	47.82	54	-6.18
10460	42.13	PK	322	1.7	H	8.47	50.60	68.2	-17.60
10460	41.96	PK	238	1.7	V	8.47	50.43	68.2	-17.77

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11ac80, 5210MHz									
4500	63.20	PK	247	1.8	H	-4.72	58.48	74	-15.52
4500	50.31	AV	247	1.8	H	-4.72	45.59	54	-8.41
4500	63.08	PK	354	2.3	V	-4.72	58.36	74	-15.64
4500	50.19	AV	354	2.3	V	-4.72	45.47	54	-8.53
5150	69.41	PK	184	2.3	H	-2.73	66.68	74	-7.32
5150	54.22	AV	184	2.3	H	-2.73	51.49	54	-2.51
5150	67.37	PK	350	1.9	V	-2.73	64.64	74	-9.36
5150	51.59	AV	350	1.9	V	-2.73	48.86	54	-5.14
5350	65.47	PK	202	1.7	H	-2.33	63.14	74	-10.86
5350	50.81	AV	202	1.7	H	-2.33	48.48	54	-5.52
5350	65.25	PK	23	1	V	-2.33	62.92	74	-11.08
5350	50.67	AV	23	1	V	-2.33	48.34	54	-5.66
5460	64.00	PK	241	2.2	H	-2.26	61.74	74	-12.26
5460	50.51	AV	241	2.2	H	-2.26	48.25	54	-5.75
5460	63.85	PK	264	1.8	V	-2.26	61.59	74	-12.41
5460	50.37	AV	264	1.8	V	-2.26	48.11	54	-5.89
10420	42.37	PK	173	2.4	H	8.31	50.68	68.2	-17.52
10420	42.16	PK	251	2.4	V	8.31	50.47	68.2	-17.73

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)					
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)									
802.11AX20														
5180MHz_26Tone_RU0(Worst Case)														
4500	63.69	PK	311	1.1	H	-4.72	58.97	74	-15.03					
4500	50.25	AV	311	1.1	H	-4.72	45.53	54	-8.47					
4500	63.54	PK	359	1.1	V	-4.72	58.82	74	-15.18					
4500	50.13	AV	359	1.1	V	-4.72	45.41	54	-8.59					
5150	72.58	PK	353	1.2	H	-2.73	69.85	74	-4.15					
5150	53.85	AV	353	1.2	H	-2.73	51.12	54	-2.88					
5150	69.37	PK	283	1.8	V	-2.73	66.64	74	-7.36					
5150	51.79	AV	283	1.8	V	-2.73	49.06	54	-4.94					
5180MHz_242Tone_RU61(Worst Case)														
10360	42.77	PK	292	1.1	H	8.12	50.89	68.2	-17.31					
10360	42.64	PK	72	1.1	V	8.12	50.76	68.2	-17.44					
5200MHz_242Tone_RU61(Worst Case)														
10400	42.64	PK	139	2.3	H	8.24	50.88	68.2	-17.32					
10400	42.49	PK	138	2.3	V	8.24	50.73	68.2	-17.47					
5240MHz_26Tone_RU8(Worst Case)														
5350	65.60	PK	175	2.1	H	-2.33	63.27	74	-10.73					
5350	50.73	AV	175	2.1	H	-2.33	48.40	54	-5.60					
5350	65.46	PK	325	1.4	V	-2.33	63.13	74	-10.87					
5350	50.57	AV	325	1.4	V	-2.33	48.24	54	-5.76					
5460	63.65	PK	115	1.9	H	-2.26	61.39	74	-12.61					
5460	50.40	AV	115	1.9	H	-2.26	48.14	54	-5.86					
5460	63.52	PK	338	2.4	V	-2.26	61.26	74	-12.74					
5460	50.29	AV	338	2.4	V	-2.26	48.03	54	-5.97					
5240MHz_242Tone_RU61(Worst Case)														
10480	42.38	PK	124	1.7	H	8.56	50.94	68.2	-17.26					
10480	42.17	PK	122	1.7	V	8.56	50.73	68.2	-17.47					

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)					
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)									
802.11AX40														
5190MHz_26Tone_RU0(Worst Case)														
4500	63.75	PK	223	1.9	H	-4.72	59.03	74	-14.97					
4500	50.41	AV	223	1.9	H	-4.72	45.69	54	-8.31					
4500	63.60	PK	358	2	V	-4.72	58.88	74	-15.12					
4500	50.27	AV	358	2	V	-4.72	45.55	54	-8.45					
5150	73.16	PK	272	1.1	H	-2.73	70.43	74	-3.57					
5150	54.05	AV	272	1.1	H	-2.73	51.32	54	-2.68					
5150	69.41	PK	261	2.3	V	-2.73	66.68	74	-7.32					
5150	51.79	AV	261	2.3	V	-2.73	49.06	54	-4.94					
5190MHz_484Tone_RU65(Worst Case)														
10380	42.62	PK	63	2.4	H	8.18	50.80	68.2	-17.40					
10380	42.49	PK	286	2.4	V	8.18	50.67	68.2	-17.53					
5230MHz_26Tone_RU17(Worst Case)														
5350	65.27	PK	294	1.7	H	-2.33	62.94	74	-11.06					
5350	50.69	AV	294	1.7	H	-2.33	48.36	54	-5.64					
5350	65.04	PK	144	1.7	V	-2.33	62.71	74	-11.29					
5350	50.53	AV	144	1.7	V	-2.33	48.20	54	-5.80					
5460	63.61	PK	255	1.4	H	-2.26	61.35	74	-12.65					
5460	50.37	AV	255	1.4	H	-2.26	48.11	54	-5.89					
5460	63.46	PK	189	2.1	V	-2.26	61.20	74	-12.80					
5460	50.23	AV	189	2.1	V	-2.26	47.97	54	-6.03					
5230MHz_484Tone_RU65(Worst Case)														
10460	42.24	PK	199	1.7	H	8.47	50.71	68.2	-17.49					
10460	42.07	PK	153	1.7	V	8.47	50.54	68.2	-17.66					

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)					
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)									
802.11AX80														
5210MHz_26Tone_RU0(Worst Case)														
4500	63.50	PK	301	1.7	H	-4.72	58.78	74	-15.22					
4500	50.43	AV	301	1.7	H	-4.72	45.71	54	-8.29					
4500	63.37	PK	14	1.8	V	-4.72	58.65	74	-15.35					
4500	50.31	AV	14	1.8	V	-4.72	45.59	54	-8.41					
5150	71.32	PK	18	1.7	H	-2.73	68.59	74	-5.41					
5150	53.95	AV	18	1.7	H	-2.73	51.22	54	-2.78					
5150	68.26	PK	185	1	V	-2.73	65.53	74	-8.47					
5150	51.91	AV	185	1	V	-2.73	49.18	54	-4.82					
5210MHz_26Tone_RU36(Worst Case)														
5350	65.37	PK	191	1.5	H	-2.33	63.04	74	-10.96					
5350	50.73	AV	191	1.5	H	-2.33	48.40	54	-5.60					
5350	65.16	PK	48	1.2	V	-2.33	62.83	74	-11.17					
5350	50.60	AV	48	1.2	V	-2.33	48.27	54	-5.73					
5460	63.85	PK	196	1.9	H	-2.26	61.59	74	-12.41					
5460	50.43	AV	196	1.9	H	-2.26	48.17	54	-5.83					
5460	63.72	PK	336	1.9	V	-2.26	61.46	74	-12.54					
5460	50.30	AV	336	1.9	V	-2.26	48.04	54	-5.96					
5210MHz_996Tone_RU67(Worst Case)														
10420	42.24	PK	172	1.7	H	8.32	50.56	68.2	-17.64					
10420	42.05	PK	103	1.7	V	8.32	50.37	68.2	-17.83					

**5725-5850 MHz:**

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11a, 5745MHz									
5650	65.87	PK	84	1.8	H	-1.95	63.92	68.2	-4.28
5650	65.72	PK	59	2	V	-1.95	63.77	68.2	-4.43
5700	69.47	PK	213	2.1	H	-2.02	67.45	105.2	-37.75
5700	66.02	PK	339	2	V	-2.02	64.00	105.2	-41.20
5720	75.24	PK	36	2	H	-1.97	73.27	110.8	-37.53
5720	73.45	PK	308	1.2	V	-1.97	71.48	110.8	-39.32
5725	79.49	PK	41	1.7	H	-1.96	77.53	122.2	-44.67
5725	75.29	PK	178	2	V	-1.96	73.33	122.2	-48.87
11490	44.20	PK	334	1.2	H	6.63	50.83	74	-23.17
11490	44.05	PK	242	1.6	V	6.63	50.68	74	-23.32
802.11a, 5785MHz									
11570	44.44	PK	323	1.7	H	6.59	51.03	74	-22.97
11570	44.29	PK	211	1.8	V	6.59	50.88	74	-23.12
802.11a, 5825MHz									
5850	71.63	PK	107	2	H	-1.81	69.82	122.2	-52.38
5850	69.72	PK	147	2	V	-1.81	67.91	122.2	-54.29
5855	73.62	PK	105	1.2	H	-1.81	71.81	110.8	-38.99
5855	73.26	PK	10	2.2	V	-1.81	71.45	110.8	-39.35
5875	64.30	PK	81	1.4	H	-1.84	62.46	105.2	-42.74
5875	62.94	PK	96	1.4	V	-1.84	61.10	105.2	-44.10
5925	66.65	PK	282	2.4	H	-1.82	64.83	68.2	-3.37
5925	66.54	PK	311	2.5	V	-1.82	64.72	68.2	-3.48
11650	42.84	PK	169	1.9	H	6.77	49.61	74	-24.39
11650	42.65	PK	7	1.6	V	6.77	49.42	74	-24.58

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11n20,5745MHz									
5650	66.00	PK	26	1.3	H	-1.95	64.05	68.2	-4.15
5650	65.85	PK	9	1.9	V	-1.95	63.90	68.2	-4.30
5700	68.33	PK	282	1.1	H	-2.02	66.31	105.2	-38.89
5700	67.25	PK	55	2.2	V	-2.02	65.23	105.2	-39.97
5720	75.11	PK	349	1.6	H	-1.97	73.14	110.8	-37.66
5720	71.14	PK	322	1.3	V	-1.97	69.17	110.8	-41.63
5725	78.93	PK	43	2.2	H	-1.96	76.97	122.2	-45.23
5725	74.92	PK	88	1.4	V	-1.96	72.96	122.2	-49.24
11490	44.28	PK	268	1.3	H	6.63	50.91	74	-23.09
11490	44.09	PK	122	1.7	V	6.63	50.72	74	-23.28
802.11n20,5785MHz									
11570	44.57	PK	94	1.4	H	6.59	51.16	74	-22.84
11570	44.38	PK	160	1.9	V	6.59	50.97	74	-23.03
802.11n20,5825MHz									
5850	73.12	PK	58	1.4	H	-1.81	71.31	122.2	-50.89
5850	71.05	PK	41	1.2	V	-1.81	69.24	122.2	-52.96
5855	70.65	PK	44	2	H	-1.81	68.84	110.8	-41.96
5855	69.36	PK	136	2	V	-1.81	67.55	110.8	-43.25
5875	68.49	PK	83	1.9	H	-1.84	66.65	105.2	-38.55
5875	68.10	PK	2	2.3	V	-1.84	66.26	105.2	-38.94
5925	66.74	PK	313	2.3	H	-1.82	64.92	68.2	-3.28
5925	66.63	PK	247	1.1	V	-1.82	64.81	68.2	-3.39
11650	42.78	PK	157	1.5	H	6.77	49.55	74	-24.45
11650	42.63	PK	190	2.3	V	6.77	49.40	74	-24.60

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11n40,5755MHz									
5650	66.07	PK	12	1.8	H	-1.95	64.12	68.2	-4.08
5650	65.95	PK	204	1.6	V	-1.95	64.00	68.2	-4.20
5700	71.23	PK	299	1.2	H	-2.02	69.21	105.2	-35.99
5700	69.67	PK	81	2.2	V	-2.02	67.65	105.2	-37.55
5720	75.71	PK	327	1.9	H	-1.97	73.74	110.8	-37.06
5720	71.83	PK	202	1.3	V	-1.97	69.86	110.8	-40.94
5725	78.33	PK	147	1.8	H	-1.96	76.37	122.2	-45.83
5725	74.49	PK	45	2.3	V	-1.96	72.53	122.2	-49.67
11510	44.22	PK	162	1.5	H	6.59	50.81	74	-23.19
11510	44.06	PK	216	1.6	V	6.59	50.65	74	-23.35
802.11n40,5795MHz									
5850	71.47	PK	266	1.8	H	-1.81	69.66	122.2	-52.54
5850	70.26	PK	66	2.3	V	-1.81	68.45	122.2	-53.75
5855	69.60	PK	324	2.3	H	-1.81	67.79	110.8	-43.01
5855	68.81	PK	57	1.8	V	-1.81	67.00	110.8	-43.80
5875	67.89	PK	44	1.6	H	-1.84	66.05	105.2	-39.15
5875	67.45	PK	278	1.8	V	-1.84	65.61	105.2	-39.59
5925	66.72	PK	79	1.5	H	-1.82	64.90	68.2	-3.30
5925	66.61	PK	199	1.4	V	-1.82	64.79	68.2	-3.41
11590	44.56	PK	286	1	H	6.57	51.13	74	-22.87
11590	44.37	PK	71	1	V	6.57	50.94	74	-23.06

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11ac20,5745MHz									
5650	66.01	PK	97	1.3	H	-1.95	64.06	68.2	-4.14
5650	65.89	PK	104	2.3	V	-1.95	63.94	68.2	-4.26
5700	68.56	PK	287	1.6	H	-2.02	66.54	105.2	-38.66
5700	67.89	PK	297	1.6	V	-2.02	65.87	105.2	-39.33
5720	75.28	PK	106	2.4	H	-1.97	73.31	110.8	-37.49
5720	71.65	PK	94	2.2	V	-1.97	69.68	110.8	-41.12
5725	78.81	PK	121	1.3	H	-1.96	76.85	122.2	-45.35
5725	74.67	PK	240	2.5	V	-1.96	72.71	122.2	-49.49
11490	44.27	PK	313	1.4	H	6.63	50.90	74	-23.10
11490	44.09	PK	240	1.7	V	6.63	50.72	74	-23.28
802.11ac20,5785MHz									
11570	44.58	PK	77	2.2	H	6.59	51.17	74	-22.83
11570	44.30	PK	282	1.8	V	6.59	50.89	74	-23.11
802.11ac20,5825MHz									
5850	73.95	PK	61	2	H	-1.81	72.14	122.2	-50.06
5850	72.42	PK	66	2.3	V	-1.81	70.61	122.2	-51.59
5855	71.72	PK	354	1.9	H	-1.81	69.91	110.8	-40.89
5855	70.37	PK	209	1.2	V	-1.81	68.56	110.8	-42.24
5875	68.13	PK	80	2.2	H	-1.84	66.29	105.2	-38.91
5875	67.66	PK	216	1.3	V	-1.84	65.82	105.2	-39.38
5925	66.77	PK	85	2.1	H	-1.82	64.95	68.2	-3.25
5925	66.65	PK	305	1.1	V	-1.82	64.83	68.2	-3.37
11650	42.73	PK	265	2.1	H	6.77	49.50	74	-24.50
11650	42.56	PK	331	1	V	6.77	49.33	74	-24.67

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11ac40,5755MHz									
5650	66.08	PK	65	1	H	-1.95	64.13	68.2	-4.07
5650	65.93	PK	243	1.9	V	-1.95	63.98	68.2	-4.22
5700	71.84	PK	225	1.4	H	-2.02	69.82	105.2	-35.38
5700	70.37	PK	289	2.4	V	-2.02	68.35	105.2	-36.85
5720	75.92	PK	244	1.2	H	-1.97	73.95	110.8	-36.85
5720	72.50	PK	354	1.8	V	-1.97	70.53	110.8	-40.27
5725	78.73	PK	307	2.2	H	-1.96	76.77	122.2	-45.43
5725	74.82	PK	308	1.1	V	-1.96	72.86	122.2	-49.34
11510	44.31	PK	97	2	H	H	50.90	74	-23.10
11510	44.13	PK	215	1.5	H	V	50.72	74	-23.28
802.11ac40,5795MHz									
5850	71.82	PK	237	1.2	H	-1.81	70.01	122.2	-52.19
5850	70.50	PK	262	1.5	V	-1.81	68.69	122.2	-53.51
5855	70.34	PK	210	2	H	-1.81	68.53	110.8	-42.27
5855	69.43	PK	68	2.2	V	-1.81	67.62	110.8	-43.18
5875	68.16	PK	144	1.3	H	-1.84	66.32	105.2	-38.88
5875	67.69	PK	164	1.8	V	-1.84	65.85	105.2	-39.35
5925	66.78	PK	75	1	H	-1.82	64.96	68.2	-3.24
5925	66.66	PK	77	1.7	V	-1.82	64.84	68.2	-3.36
11590	44.53	PK	334	2.3	H	6.57	51.10	74	-22.90
11590	44.39	PK	131	2.2	V	6.57	50.96	74	-23.04

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11ac80,5775MHz									
5650	65.81	PK	255	1.1	H	-1.95	63.86	68.2	-4.34
5650	65.16	PK	0	1.3	V	-1.95	63.21	68.2	-4.99
5700	68.84	PK	325	2.3	H	-2.02	66.82	105.2	-38.38
5700	65.89	PK	112	1.3	V	-2.02	63.87	105.2	-41.33
5720	72.94	PK	262	1.8	H	-1.97	70.97	110.8	-39.83
5720	67.82	PK	322	2.3	V	-1.97	65.85	110.8	-44.95
5725	72.61	PK	260	2	H	-1.96	70.65	122.2	-51.55
5725	67.84	PK	145	1.1	V	-1.96	65.88	122.2	-56.32
5850	73.51	PK	149	2.2	H	-1.81	71.70	122.2	-50.50
5850	69.48	PK	234	1.8	V	-1.81	67.67	122.2	-54.53
5855	71.47	PK	288	2.4	H	-1.81	69.66	110.8	-41.14
5855	67.71	PK	43	2	V	-1.81	65.90	110.8	-44.90
5875	66.32	PK	355	1.6	H	-1.84	64.48	105.2	-40.72
5875	67.12	PK	224	1.9	V	-1.84	65.28	105.2	-39.92
5925	66.56	PK	345	2	H	-1.82	64.74	68.2	-3.46
5925	66.57	PK	135	2.2	V	-1.82	64.75	68.2	-3.45
11550	43.10	PK	221	1.3	H	6.61	49.71	74	-24.29
11550	43.65	PK	186	1.2	V	6.61	50.26	74	-23.74

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)					
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)									
802.11AX20														
5745MHz_26Tone_RU0(Worst Case)														
5650	64.73	PK	36	2.1	H	-1.95	62.78	68.2	-5.42					
5650	64.41	PK	20	2.4	V	-1.95	62.46	68.2	-5.74					
5700	66.24	PK	296	2.2	H	-2.02	64.22	105.2	-40.98					
5700	65.30	PK	306	2.3	V	-2.02	63.28	105.2	-41.92					
5720	73.45	PK	119	1.7	H	-1.97	71.48	110.8	-39.32					
5720	65.78	PK	90	2	V	-1.97	63.81	110.8	-46.99					
5725	76.87	PK	192	2.4	H	-1.96	74.91	122.2	-47.29					
5725	70.95	PK	156	1.2	V	-1.96	68.99	122.2	-53.21					
5745MHz_242Tone_RU61(Worst Case)														
11490	42.25	PK	58	1.2	H	6.63	48.88	74	-25.12					
11490	42.60	PK	345	1.3	V	6.63	49.23	74	-24.77					
5785MHz_242Tone_RU61(Worst Case)														
11570	42.98	PK	15	2.3	H	6.59	49.57	74	-24.43					
11570	43.29	PK	170	1.4	V	6.59	49.88	74	-24.12					
5825MHz_26Tone_RU8(Worst Case)														
5850	74.98	PK	219	1.4	H	-1.81	73.17	122.2	-49.03					
5850	70.74	PK	256	1.3	V	-1.81	68.93	122.2	-53.27					
5855	71.53	PK	189	2.2	H	-1.81	69.72	110.8	-41.08					
5855	67.47	PK	243	1.6	V	-1.81	65.66	110.8	-45.14					
5875	66.87	PK	126	1.7	H	-1.84	65.03	105.2	-40.17					
5875	66.97	PK	146	1.9	V	-1.84	65.13	105.2	-40.07					
5925	65.41	PK	77	1.5	H	-1.82	63.59	68.2	-4.61					
5925	66.20	PK	248	1.3	V	-1.82	64.38	68.2	-3.82					
5825MHz_242Tone_RU61(Worst Case)														
11650	41.92	PK	245	1.1	H	6.77	48.69	74	-25.31					
11650	41.60	PK	106	1.4	V	6.77	48.37	74	-25.63					

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)					
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)									
802.11AX40														
5755MHz_26Tone_RU0(Worst Case)														
5650	65.51	PK	131	1.3	H	-1.95	63.56	68.2	-4.64					
5650	65.19	PK	349	2.2	V	-1.95	63.24	68.2	-4.96					
5700	70.63	PK	140	1.4	H	-2.02	68.61	105.2	-36.59					
5700	65.67	PK	47	1.4	V	-2.02	63.65	105.2	-41.55					
5720	78.56	PK	263	1.8	H	-1.97	76.59	110.8	-34.21					
5720	73.27	PK	251	2.1	V	-1.97	71.30	110.8	-39.50					
5725	82.12	PK	355	1.9	H	-1.96	80.16	122.2	-42.04					
5725	75.86	PK	227	1.5	V	-1.96	73.90	122.2	-48.30					
5755MHz_484Tone_RU65(Worst Case)														
11510	42.74	PK	354	1.9	H	6.59	49.33	74	-24.67					
11510	42.79	PK	79	1.8	V	6.59	49.38	74	-24.62					
5795MHz_26Tone_RU17(Worst Case)														
5850	72.09	PK	46	2.4	H	-1.81	70.28	122.2	-51.92					
5850	66.48	PK	210	2.4	V	-1.81	64.67	122.2	-57.53					
5855	67.60	PK	280	1.3	H	-1.81	65.79	110.8	-45.01					
5855	66.80	PK	30	1.9	V	-1.81	64.99	110.8	-45.81					
5875	66.47	PK	155	1.8	H	-1.84	64.63	105.2	-40.57					
5875	66.06	PK	143	2.3	V	-1.84	64.22	105.2	-40.98					
5925	66.27	PK	132	1.8	H	-1.82	64.45	68.2	-3.75					
5925	66.02	PK	162	1.6	V	-1.82	64.20	68.2	-4.00					
5795MHz_484Tone_RU65(Worst Case)														
11590	43.13	PK	86	1.8	H	6.57	49.70	74	-24.30					
11590	42.95	PK	61	1.4	V	6.57	49.52	74	-24.48					

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)					
	Reading (dB $\mu$ V)	PK/QP/AV		Height (m)	Polar (H/V)									
802.11AX80														
5775MHz_26Tone_RU0(Worst Case)														
5650	66.10	PK	234	1.7	H	-1.95	64.15	68.2	-4.05					
5650	65.44	PK	13	1.7	V	-1.95	63.49	68.2	-4.71					
5700	73.04	PK	339	1.9	H	-2.02	71.02	105.2	-34.18					
5700	68.09	PK	292	2.1	V	-2.02	66.07	105.2	-39.13					
5720	76.27	PK	193	1.3	H	-1.97	74.30	110.8	-36.50					
5720	70.53	PK	74	1.9	V	-1.97	68.56	110.8	-42.24					
5725	80.01	PK	205	1.7	H	-1.96	78.05	122.2	-44.15					
5725	76.07	PK	303	1.7	V	-1.96	74.11	122.2	-48.09					
5775MHz_26Tone_RU36(Worst Case)														
5850	75.05	PK	106	1.1	H	-1.81	73.24	122.2	-48.96					
5850	70.51	PK	139	1.8	V	-1.81	68.70	122.2	-53.50					
5855	73.55	PK	137	2.1	H	-1.81	71.74	110.8	-39.06					
5855	67.00	PK	353	1.9	V	-1.81	65.19	110.8	-45.61					
5875	67.16	PK	258	1.1	H	-1.84	65.32	105.2	-39.88					
5875	65.80	PK	0	2.2	V	-1.84	63.96	105.2	-41.24					
5925	66.45	PK	101	1.9	H	-1.82	64.63	68.2	-3.57					
5925	65.94	PK	283	1.8	V	-1.82	64.12	68.2	-4.08					
5775MHz_996Tone_RU67(Worst Case)														
11550	43.83	PK	154	1.5	H	6.61	50.44	74	-23.56					
11550	42.90	PK	196	2.2	V	6.61	49.51	74	-24.49					

**Note:**

Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

Corrected Amplitude = Corrected Factor + Reading

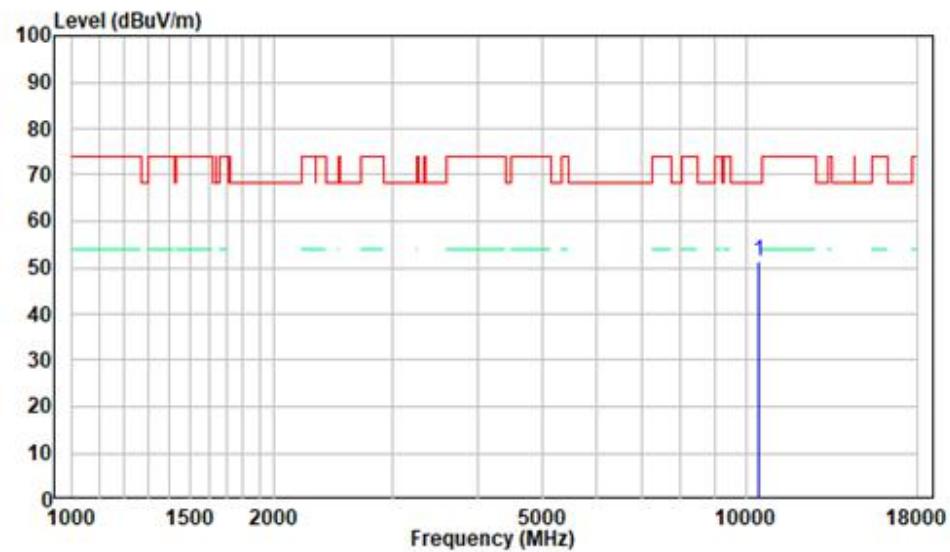
Margin = Corrected. Amplitude - Limit

The other spurious emission which is in the noise floor level was not recorded.

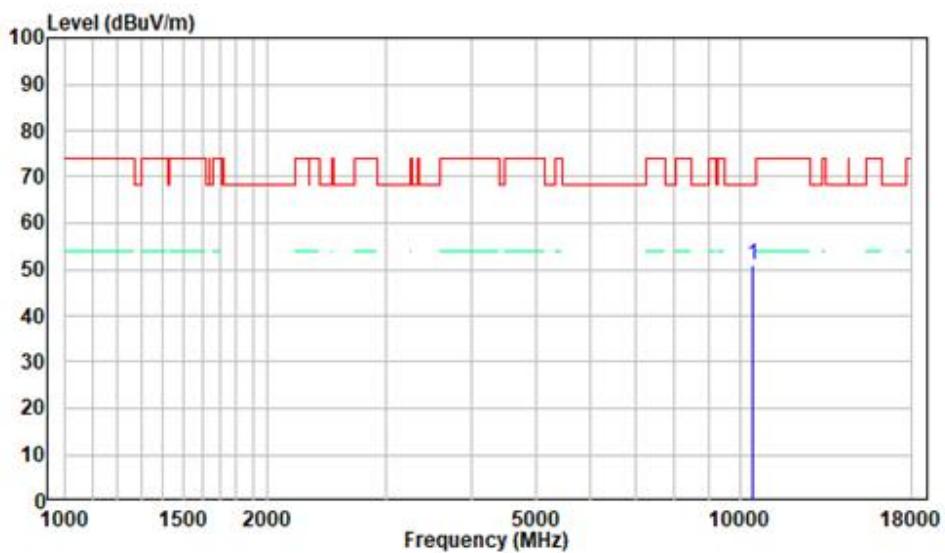
The test result of peak was less than the limit of average, so just peak value were recorded.

**1 GHz - 18 GHz: (Pre-Scan plots)**  
802.11a, 5240MHz

Horizontal



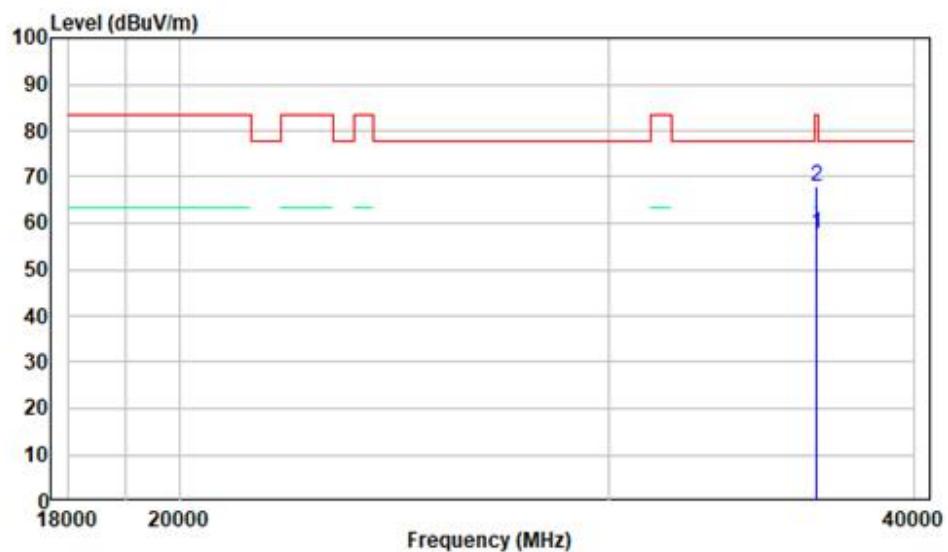
Vertical



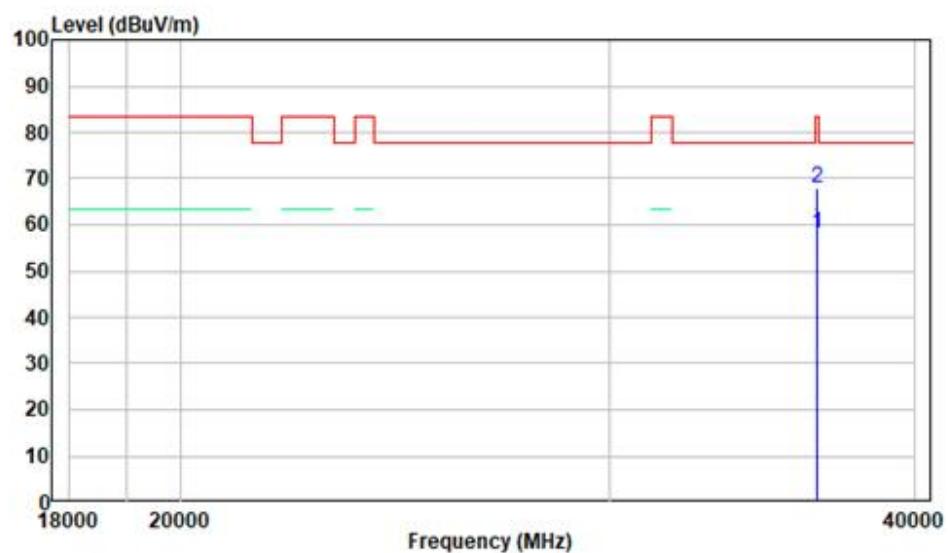
**18-40GHz:** (Pre-Scan plots)

802.11a, 5240MHz

Horizontal



Vertical



## FCC §15.407(a),(e) – 26 dB & 6dB EMISSION BANDWIDTH

### Applicable Standard

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

### Test Procedure

#### 1. Emission Bandwidth (EBW)

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW  $>$  RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

#### 2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW)  $\geq 3 \times$  RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



## Test Data

### Environmental Conditions

Temperature:	25°C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

*The testing was performed by Roger Ling from 2022-09-16 to 2022-09-17*

*EUT operation mode: Transmitting*

**Test Result: Pass**

*Please refer to the Appendix.*

## FCC §15.407(a) – CONDUCTED TRANSMITTER OUTPUT POWER

### Applicable Standard

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### Test Procedure

- c. Place the EUT on a bench and set it in transmitting mode.
- d. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
- e. Add a correction factor to the display.



Note: the RF control unit has a built-in power sensor.

## Test Data

### Environmental Conditions

Temperature:	25°C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

*The testing was performed by Roger Ling from 2022-09-16 to 2022-09-17*

*EUT operation mode: Transmitting*

### Test Result: Pass

*Please refer to the Appendix.*

## FCC §15.407(a) - POWER SPECTRAL DENSITY

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### Test Procedure

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth ( $< 1 \text{ MHz}$ , or  $< 500 \text{ kHz}$ ) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- a) Set RBW  $\geq 1/T$ , where T is defined in section II.B.1.a).
- b) Set VBW  $\geq 3 \text{ RBW}$ .
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add  $10 \log (500 \text{ kHz}/\text{RBW})$  to the measured result, whereas RBW ( $< 500 \text{ kHz}$ ) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add  $10 \log (1\text{MHz}/\text{RBW})$  to the measured result, whereas RBW ( $< 1 \text{ MHz}$ ) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.



## Test Data

### Environmental Conditions

Temperature:	25°C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

*The testing was performed by Roger Ling from 2022-09-16 to 2022-09-17*

*EUT operation mode: Transmitting*

**Test Result: Pass**

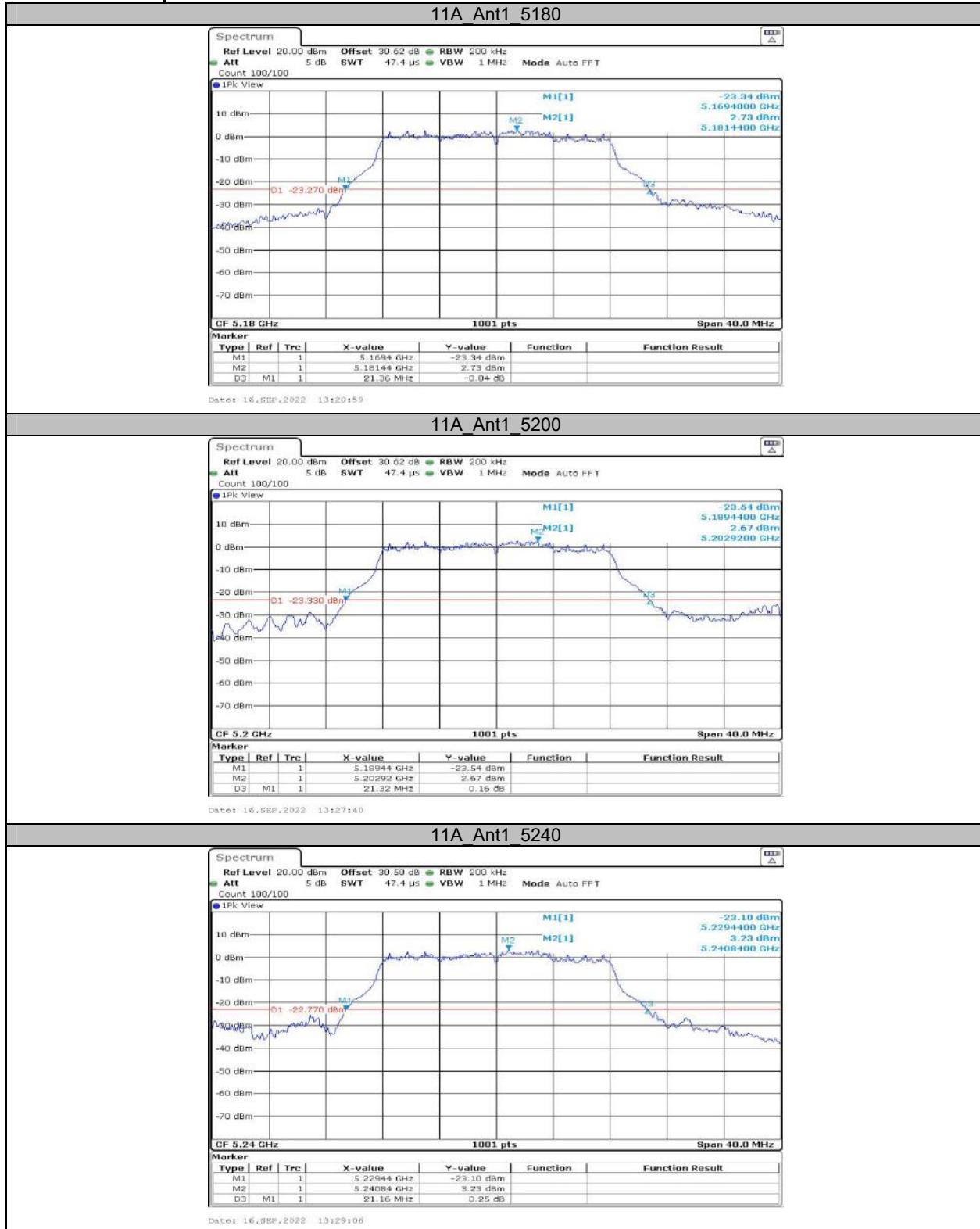
*Please refer to the Appendix.*

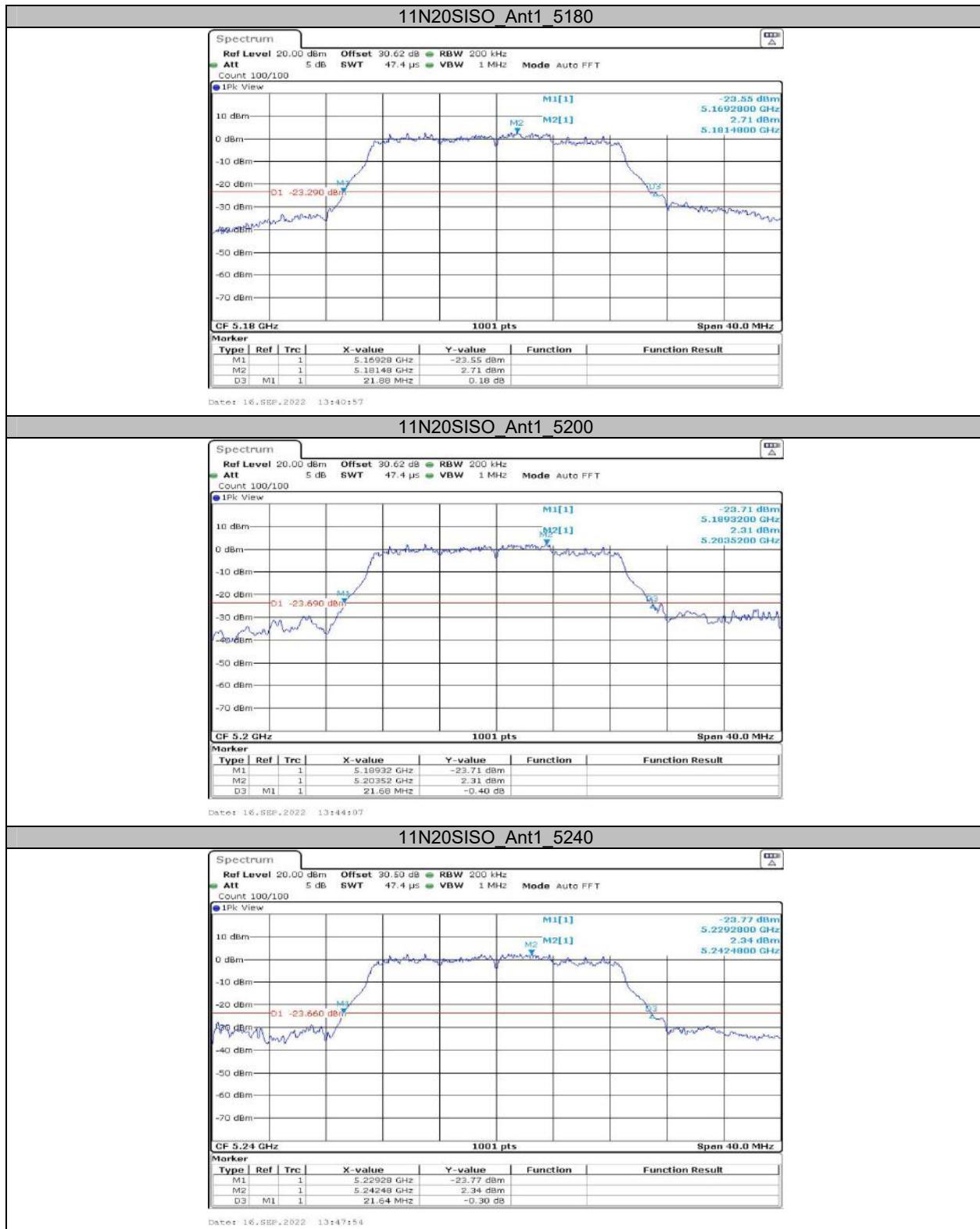
## APPENDIX

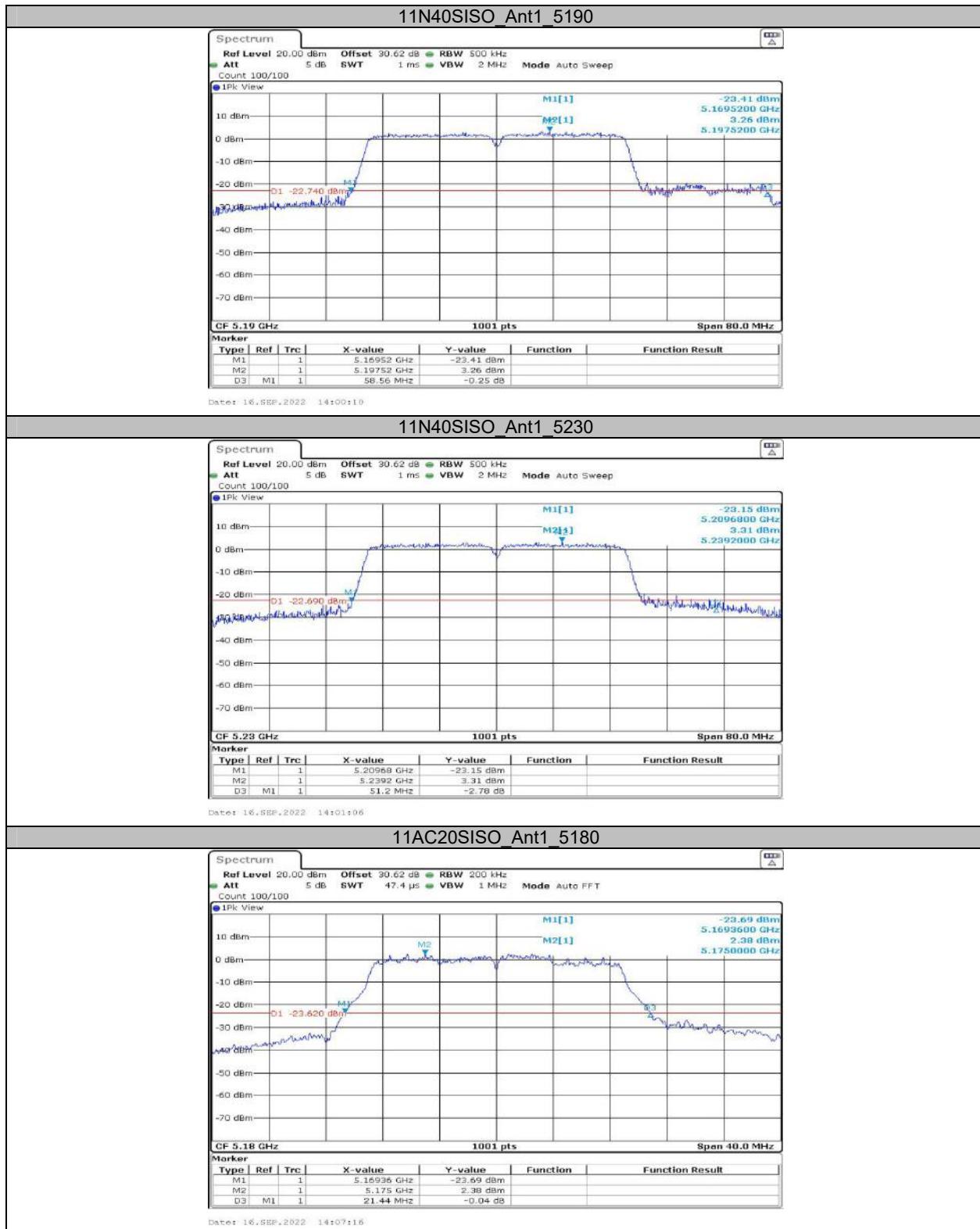
### Appendix A1: Emission Bandwidth Test Result

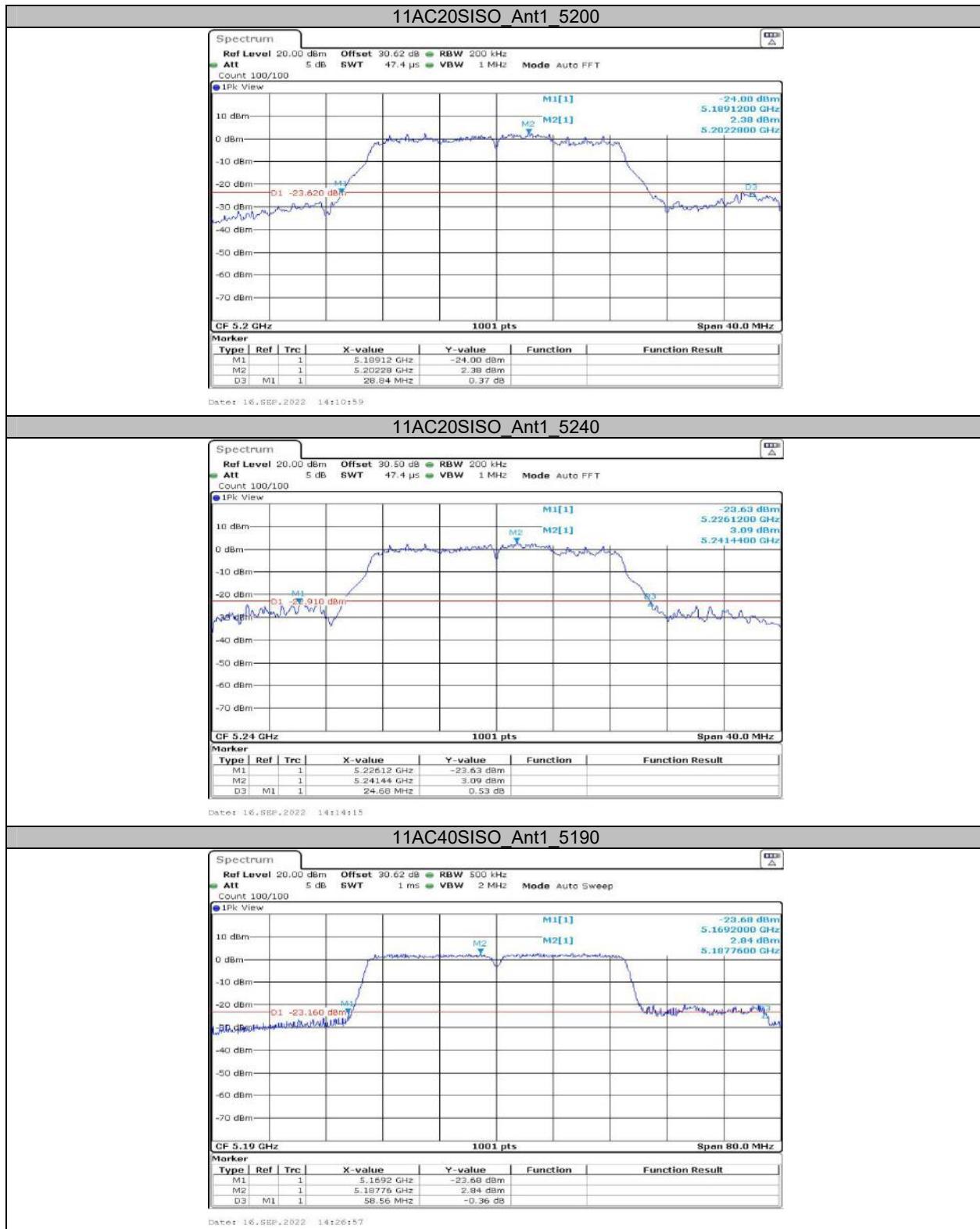
Test Mode	Antenna	Channel	26db EBW [MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	21.36	---	---
		5200	21.32	---	---
		5240	21.16	---	---
11N20SISO	Ant1	5180	21.88	---	---
		5200	21.68	---	---
		5240	21.64	---	---
11N40SISO	Ant1	5190	58.56	---	---
		5230	51.20	---	---
11AC20SISO	Ant1	5180	21.44	---	---
		5200	28.84	---	---
		5240	24.68	---	---
11AC40SISO	Ant1	5190	58.56	---	---
		5230	51.28	---	---
11AC80SISO	Ant1	5210	95.84	---	---
11AX20SISO (worst case 242Tone)	Ant1	5180	21.56	---	---
		5200	21.44	---	---
		5240	21.44	---	---
11AX40SISO (worst case 484 Tone)	Ant1	5190	50.56	---	---
		5230	40.88	---	---
11AX80SISO (worst case 996 Tone)	Ant1	5210	82.40	---	---

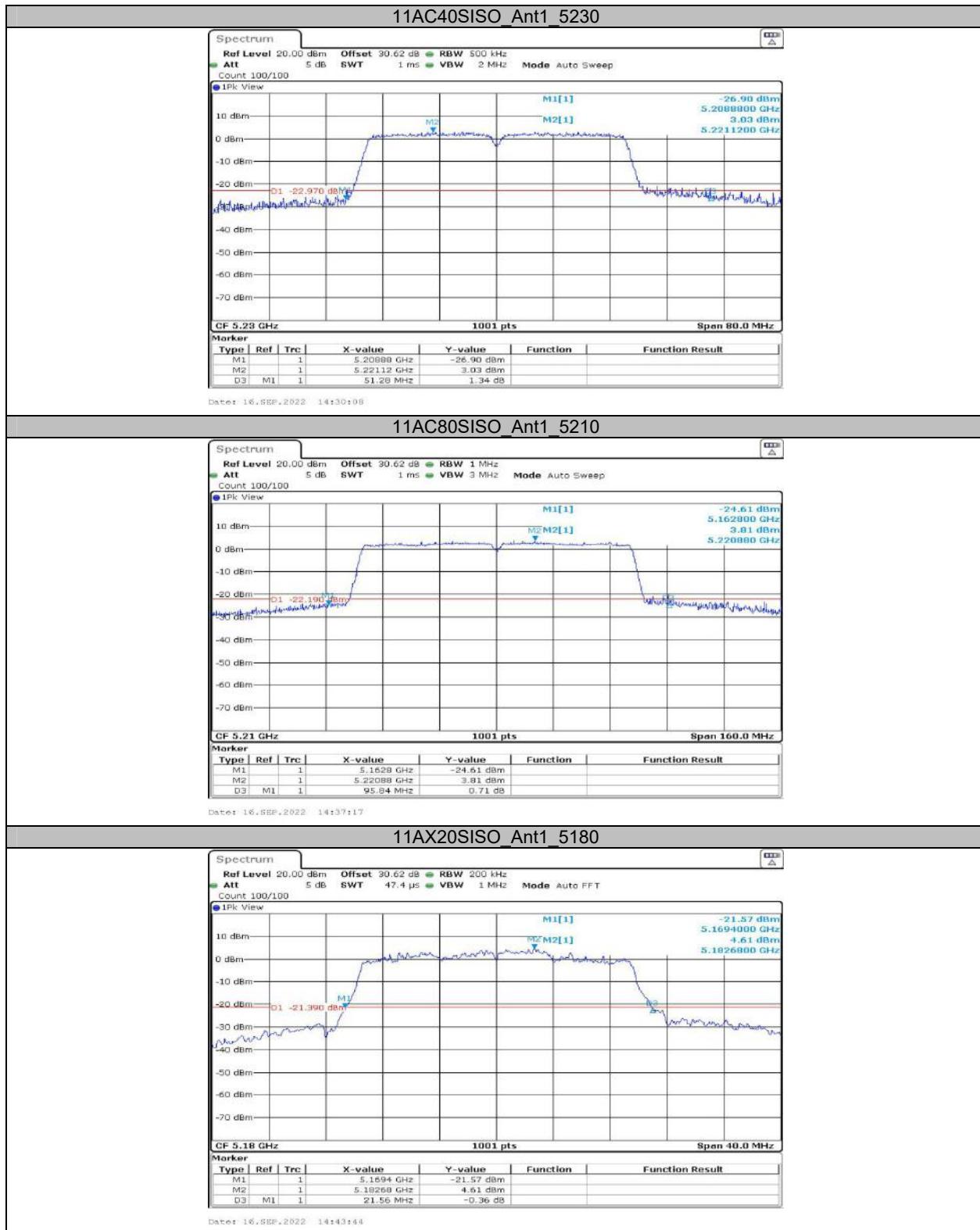
## Test Graphs

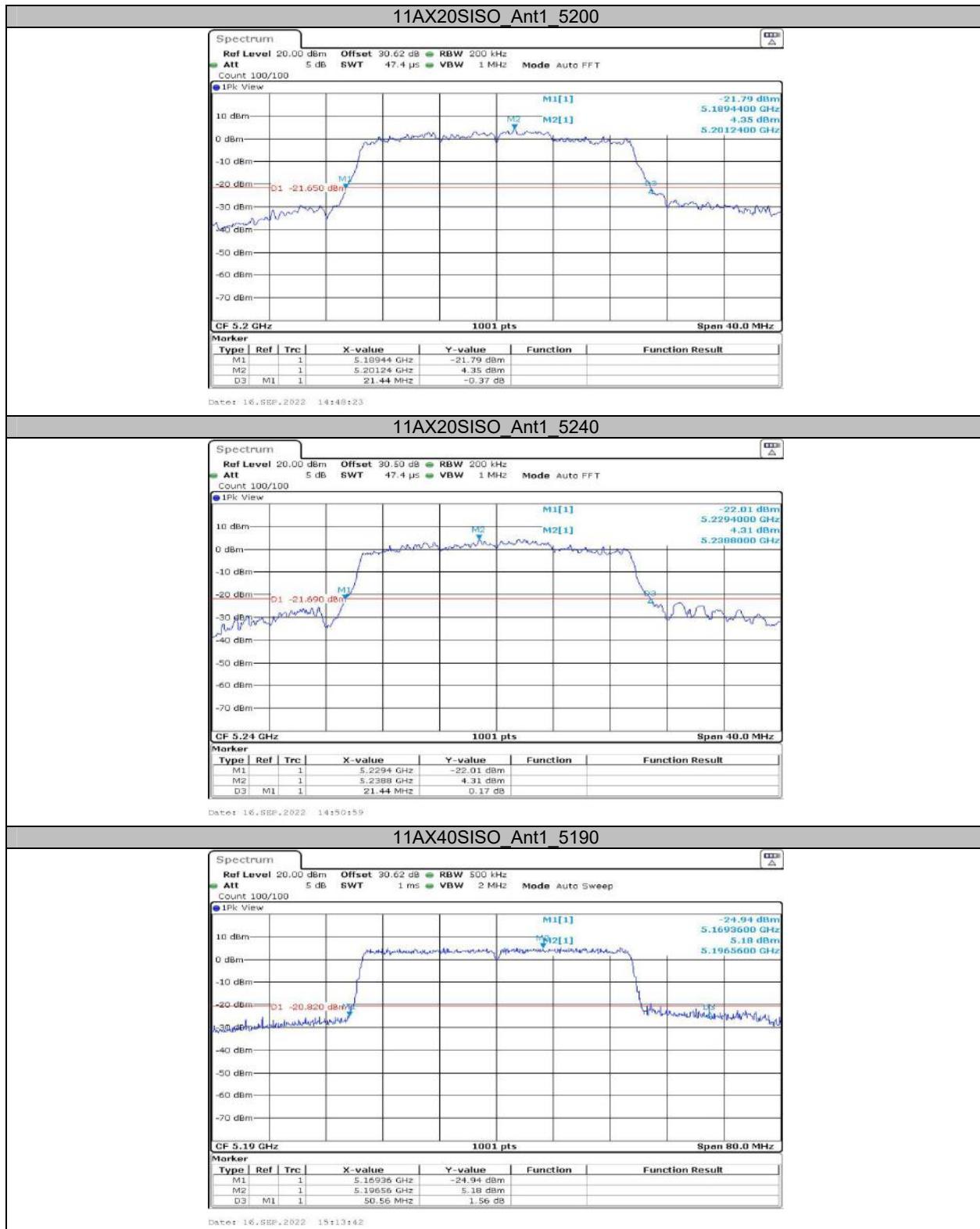


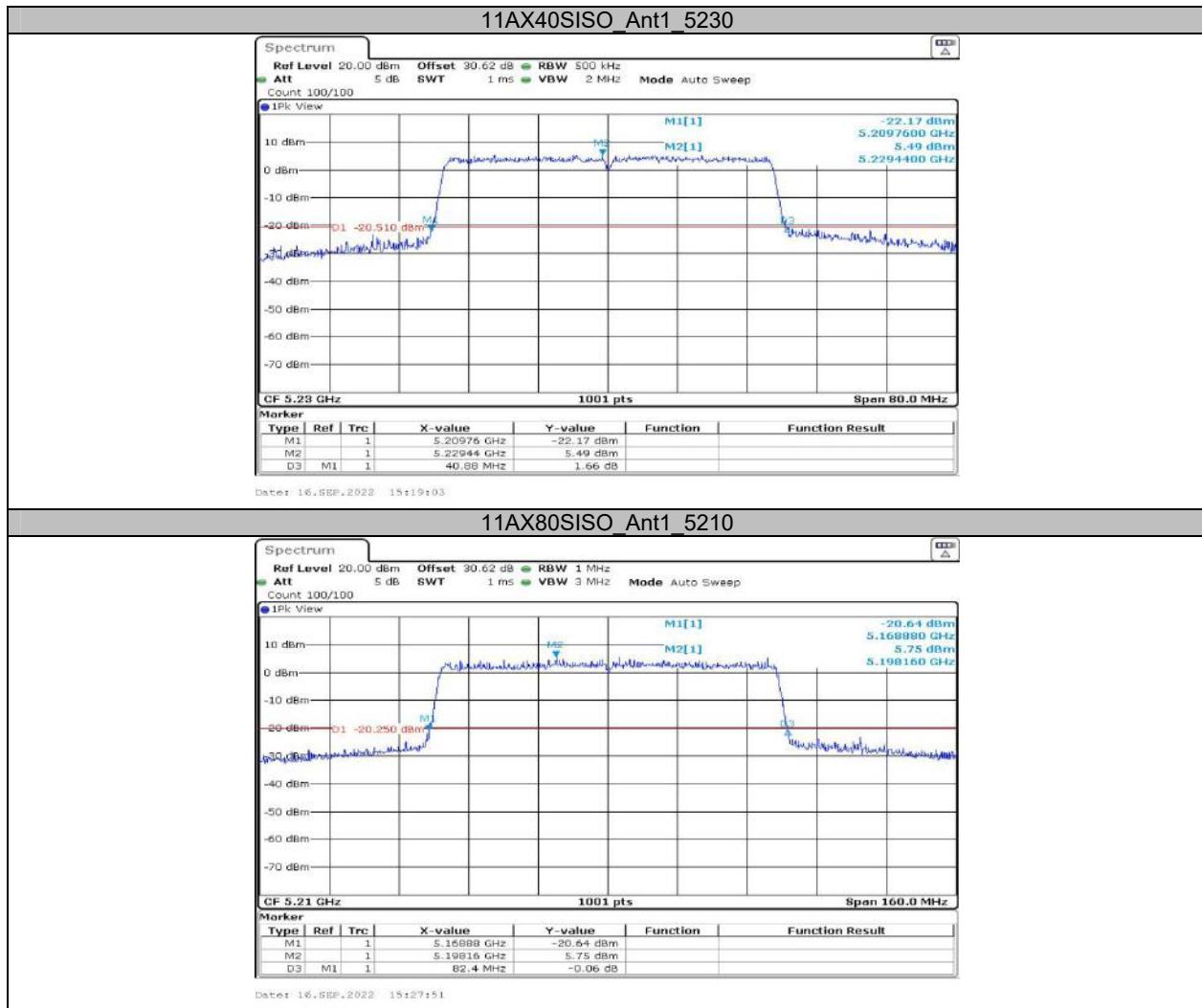










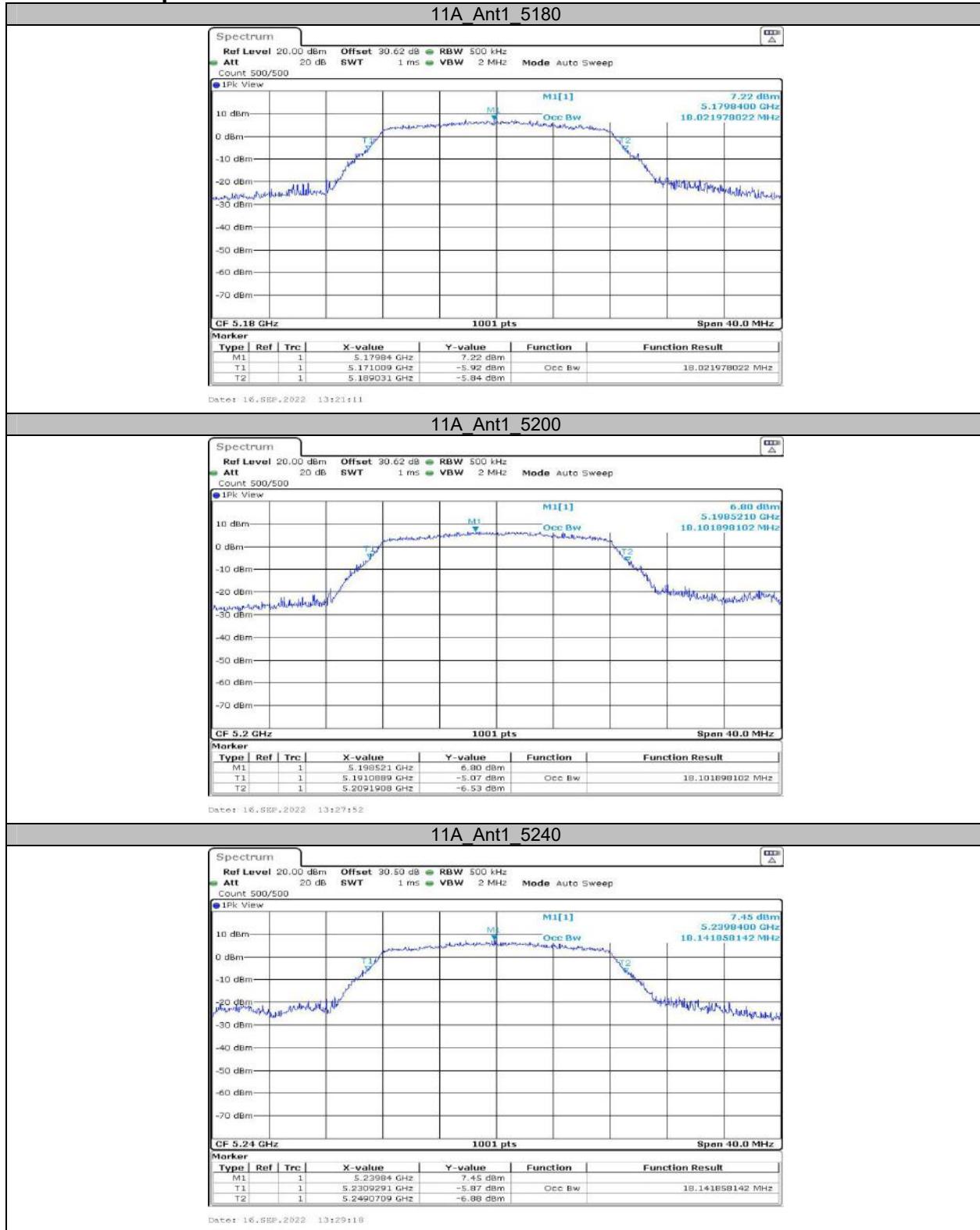


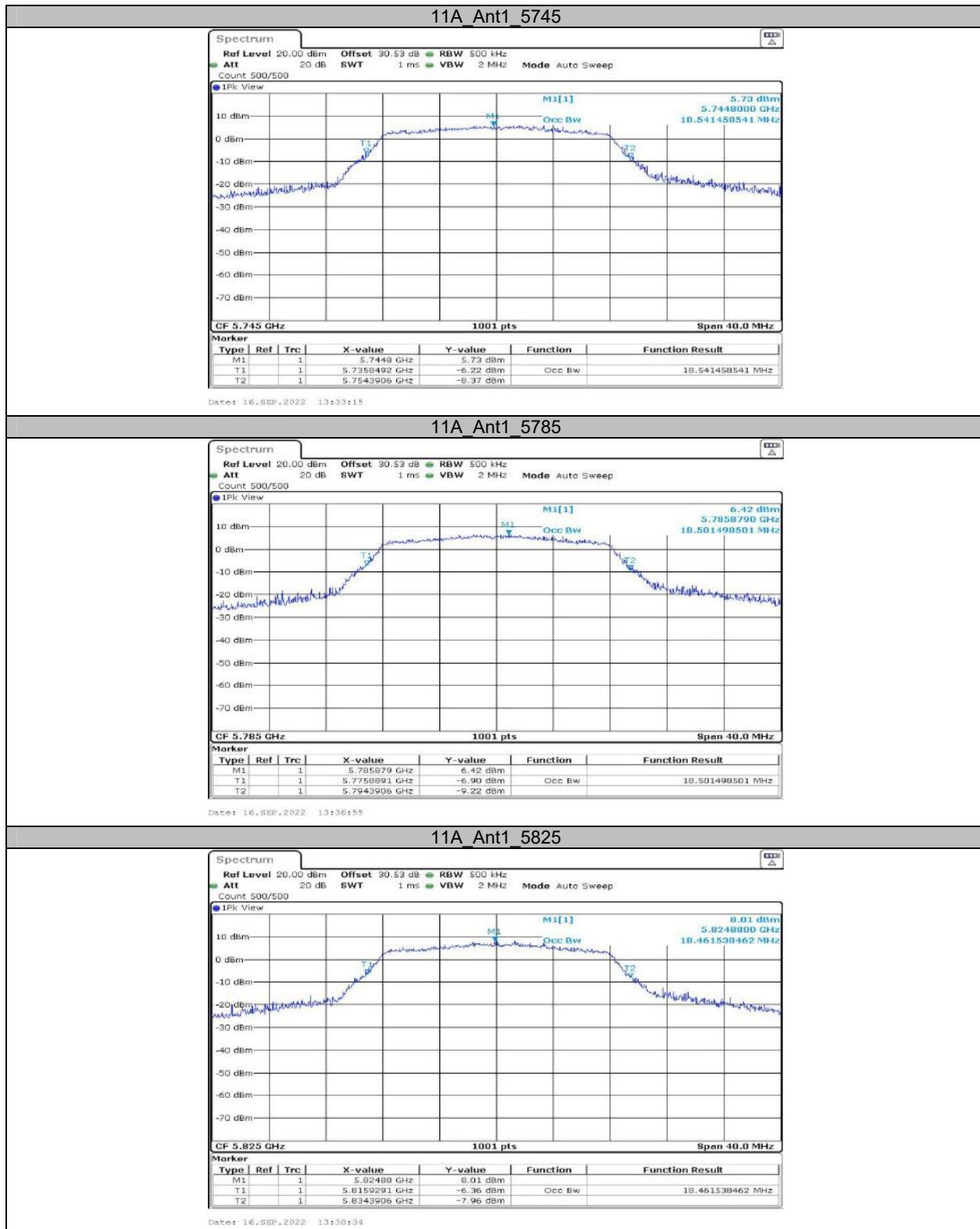
## Appendix A2: Occupied channel bandwidth Test Result

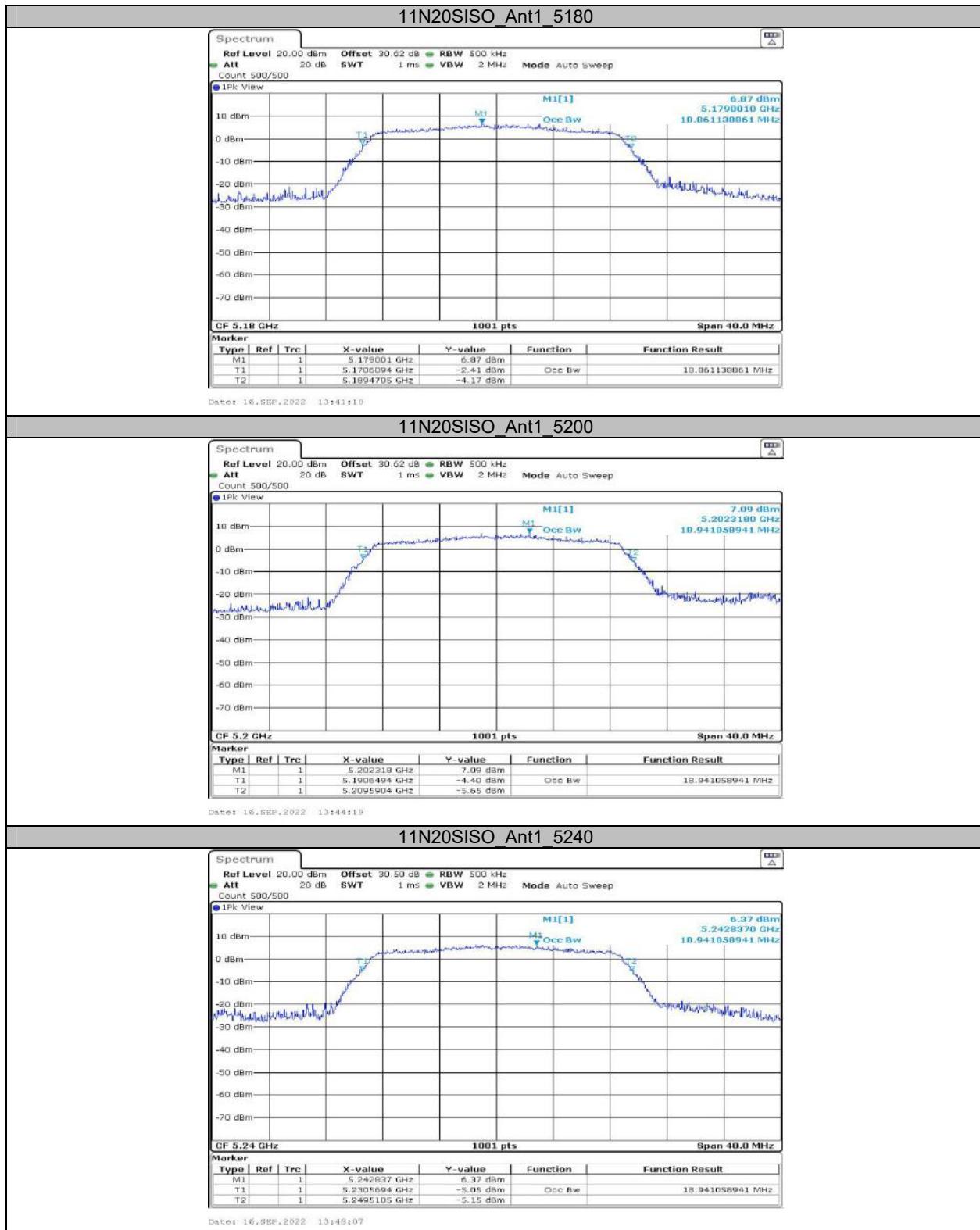
Test Mode	Antenna	Channel	OCB [MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	18.022	---	---
		5200	18.102	---	---
		5240	18.142	---	---
		5745	18.541	---	---
		5785	18.501	---	---
		5825	18.462	---	---
11N20SISO	Ant1	5180	18.861	---	---
		5200	18.941	---	---
		5240	18.941	---	---
		5745	19.261	---	---
		5785	19.221	---	---
		5825	19.341	---	---
11N40SISO	Ant1	5190	37.483	---	---
		5230	37.323	---	---
		5755	37.642	---	---
		5795	37.722	---	---
11AC20SISO	Ant1	5180	18.901	---	---
		5200	18.981	---	---
		5240	18.981	---	---
		5745	19.221	---	---
		5785	19.221	---	---
		5825	19.301	---	---
11AC40SISO	Ant1	5190	37.483	---	---
		5230	37.323	---	---
		5755	37.642	---	---
		5795	37.722	---	---
11AC80SISO	Ant1	5210	76.723	---	---
		5775	77.363	---	---
11AX20SISO (worst case 242Tone)	Ant1	5180	19.221	---	---
		5200	19.181	---	---
		5240	19.261	---	---
		5745	19.301	---	---
		5785	19.301	---	---
		5825	19.261	---	---
11AX40SISO (worst case 484Tone)	Ant1	5190	38.122	---	---
		5230	38.042	---	---
		5755	38.442	---	---
		5795	38.521	---	---
11AX80SISO (worst case 996Tone)	Ant1	5210	78.002	---	---
		5775	78.482	---	---

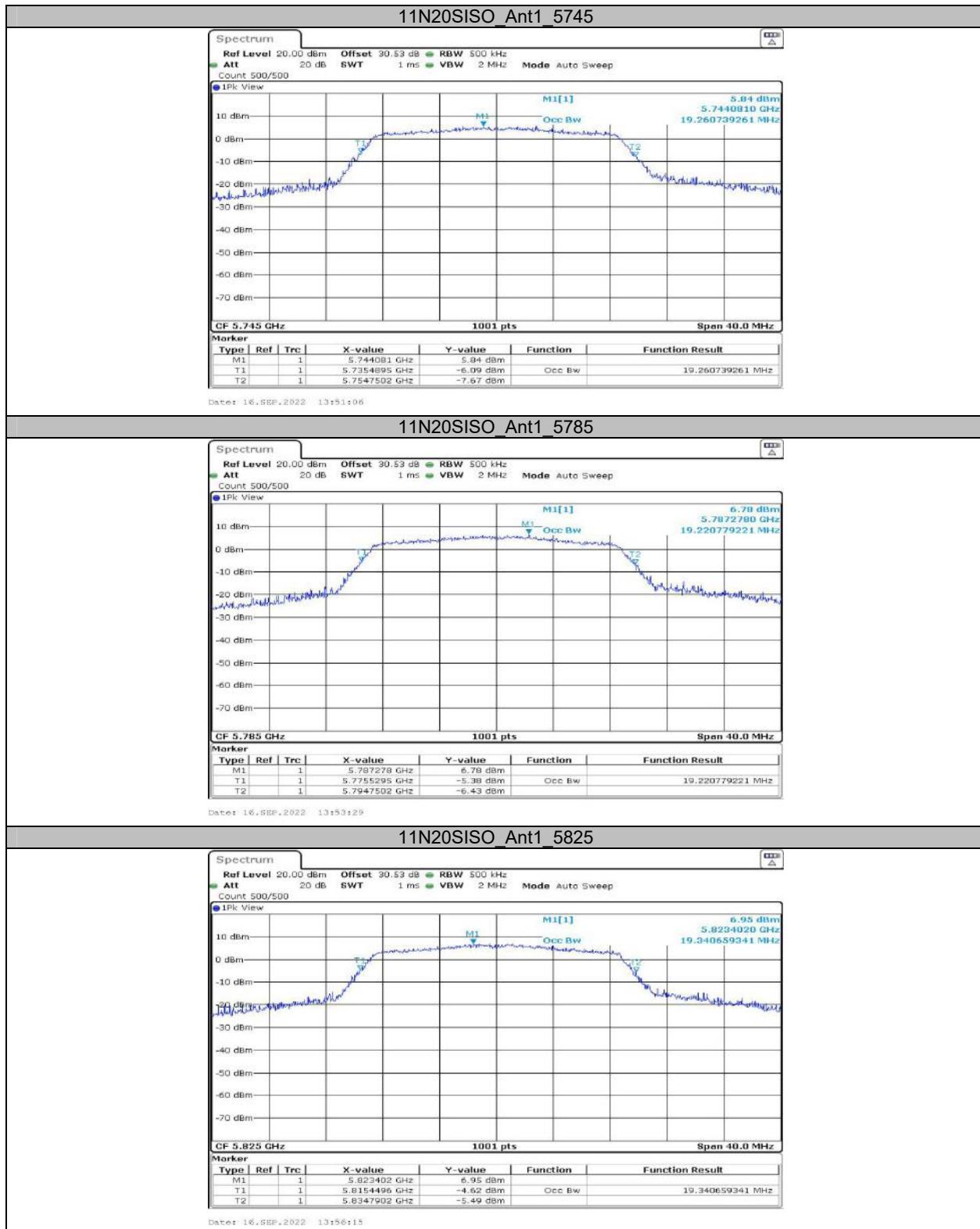
Note: the EUT not operating with any part of OBW fall within 5250-5350MHz and 5470-5725MHz range.

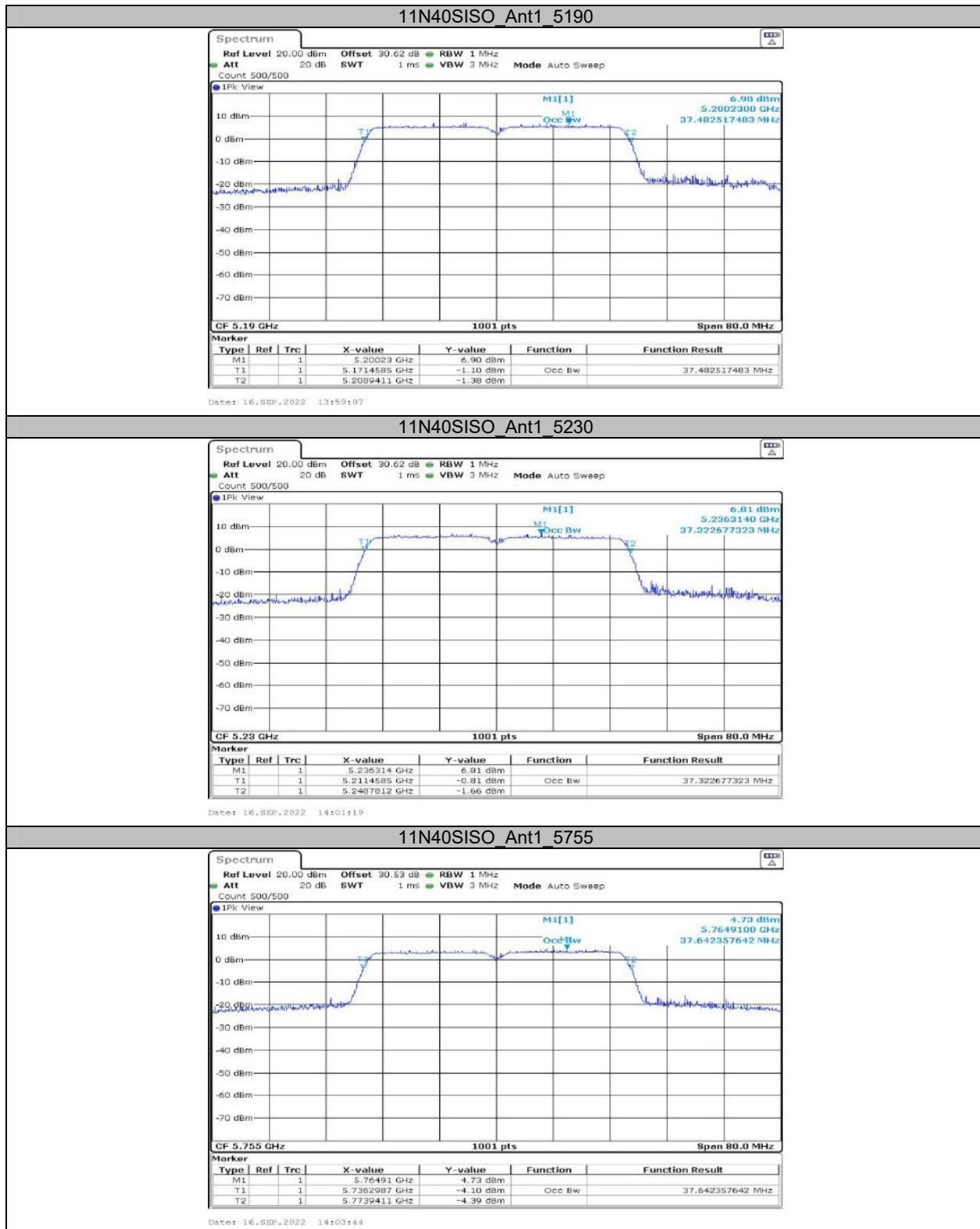
## Test Graphs

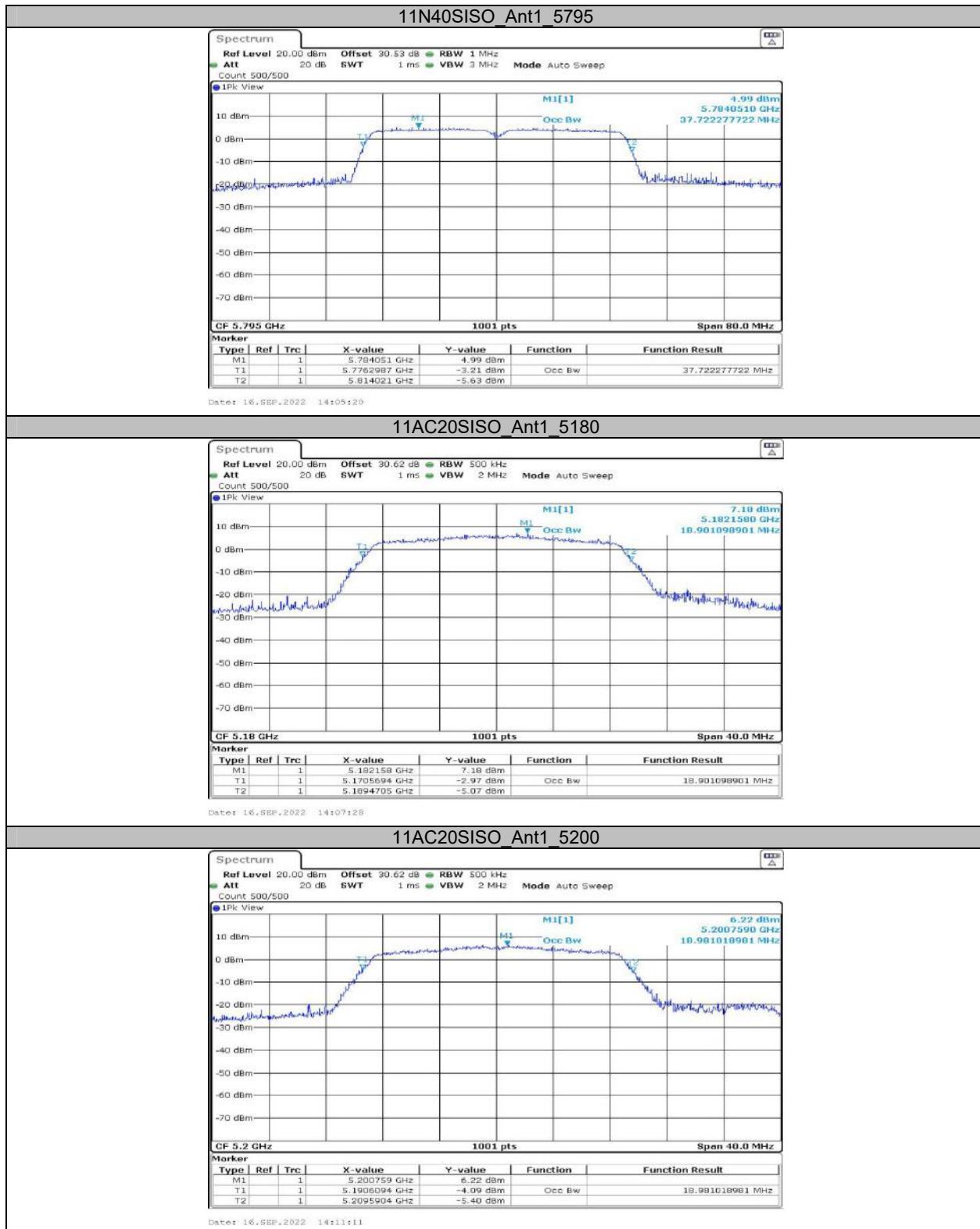


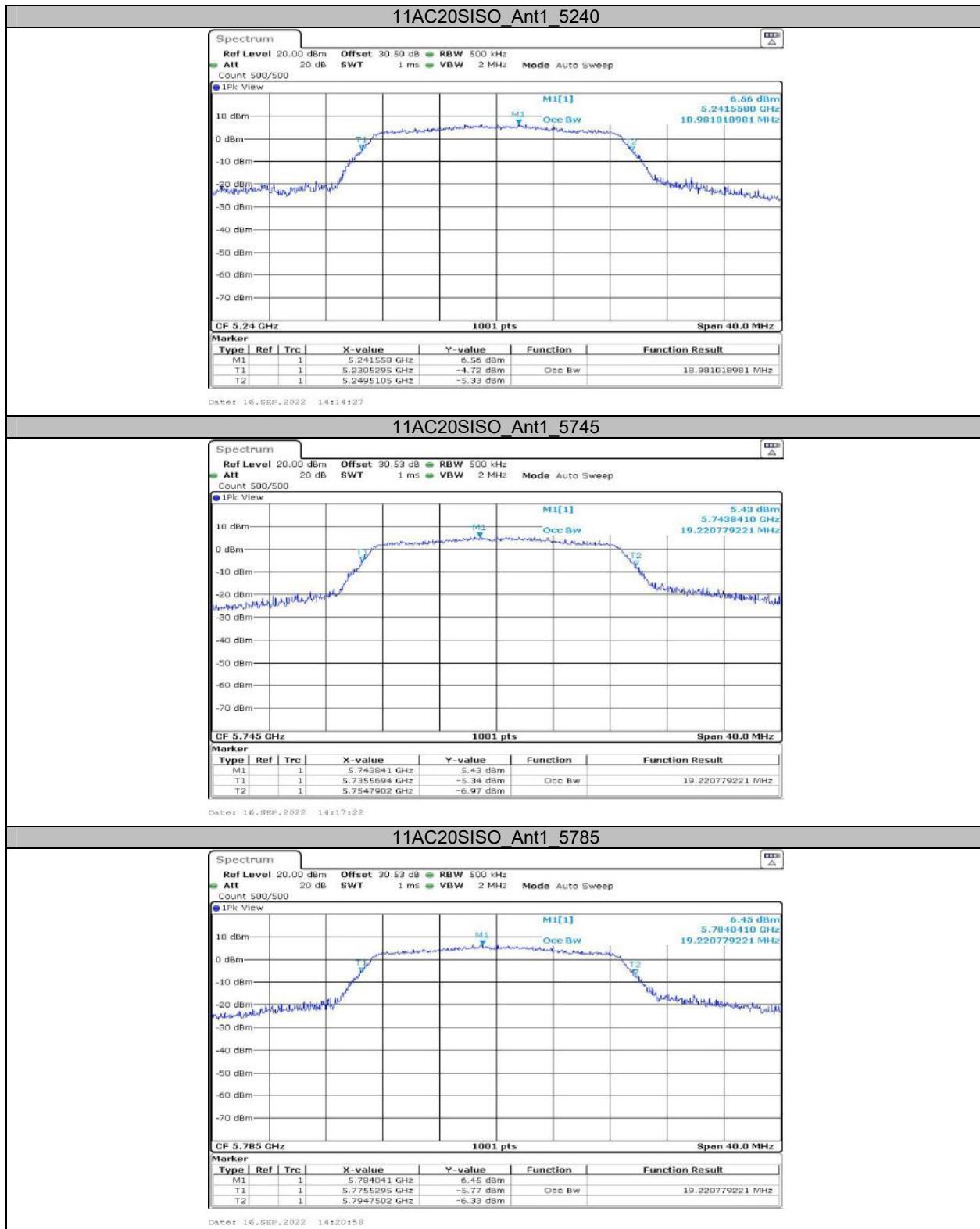


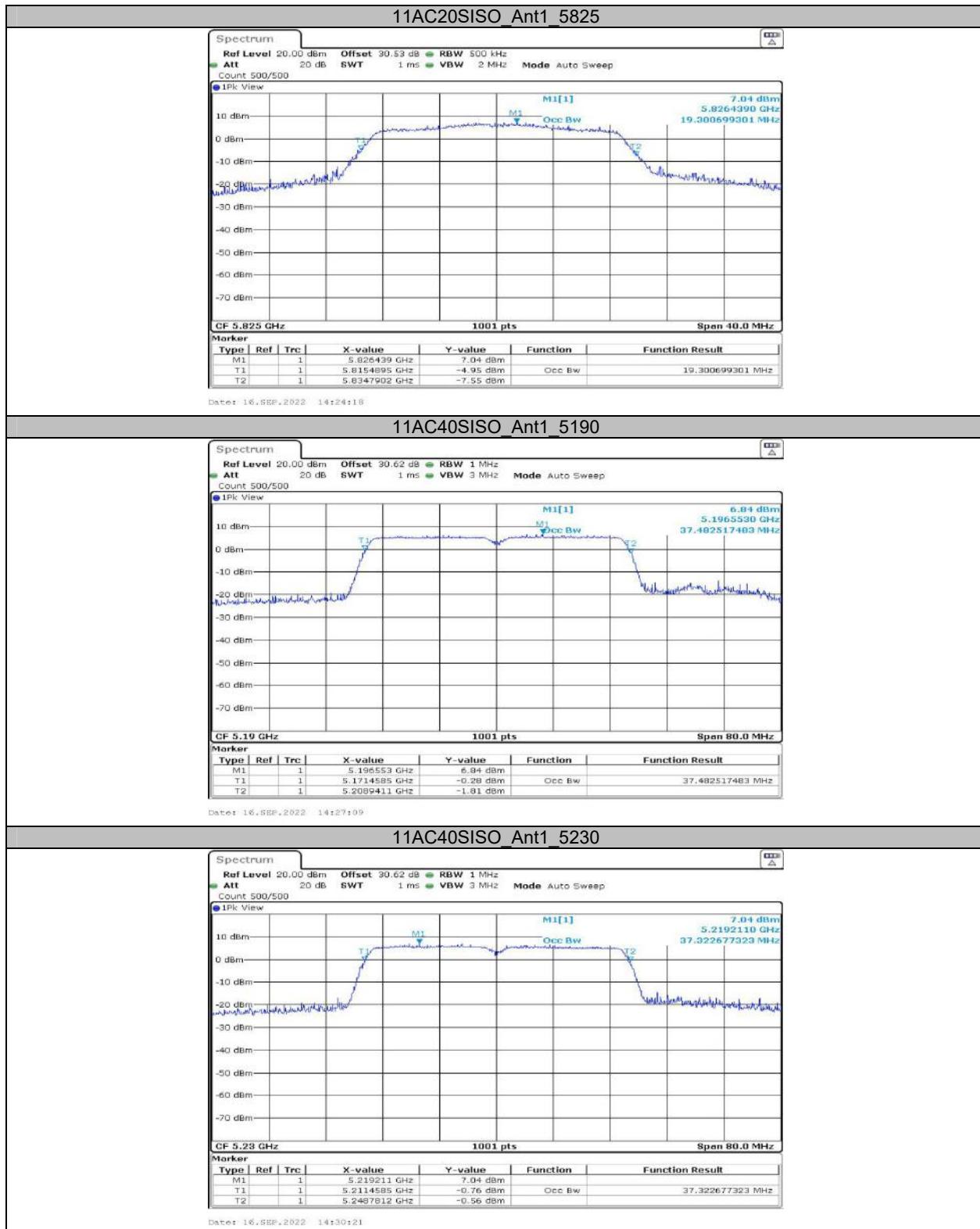


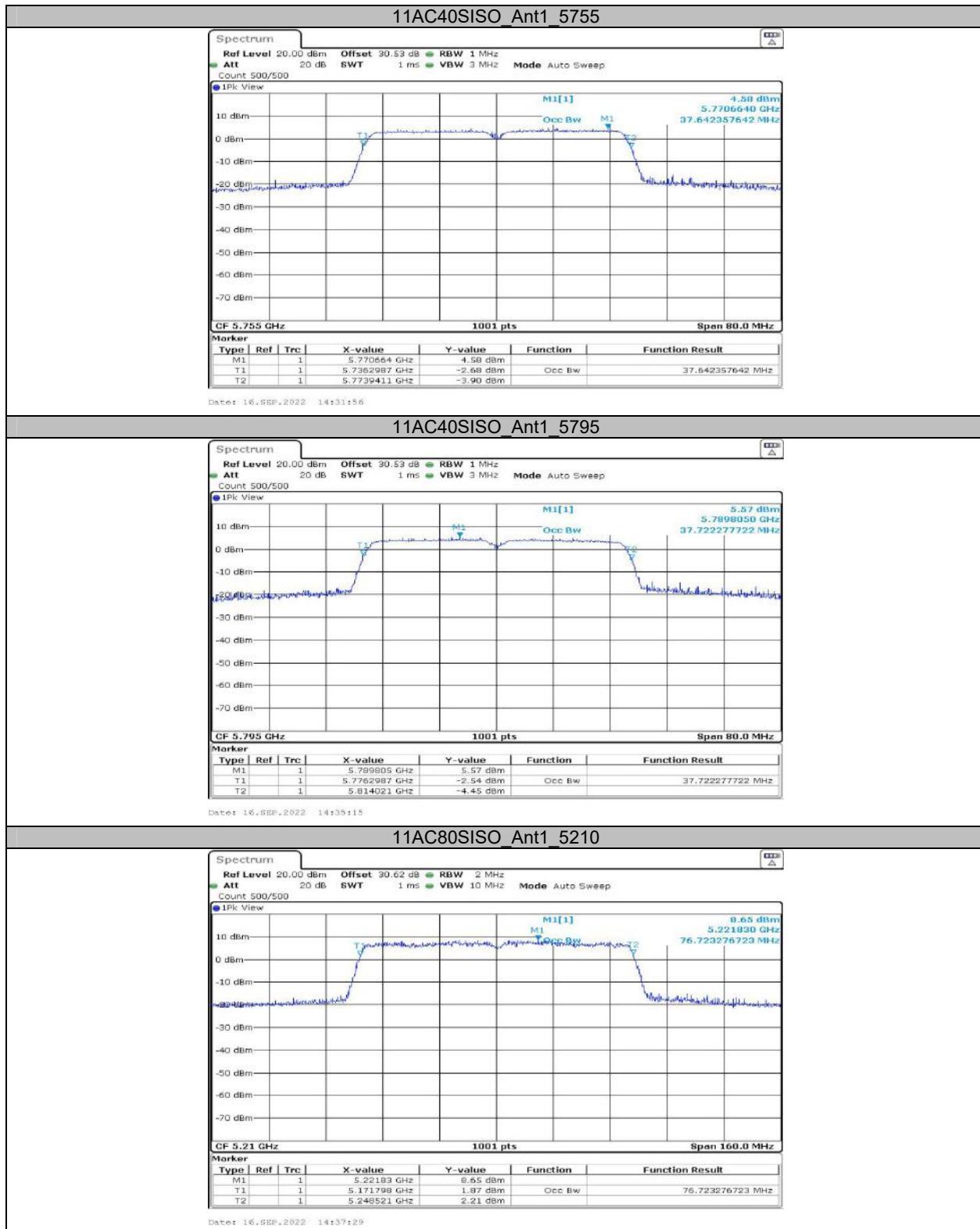


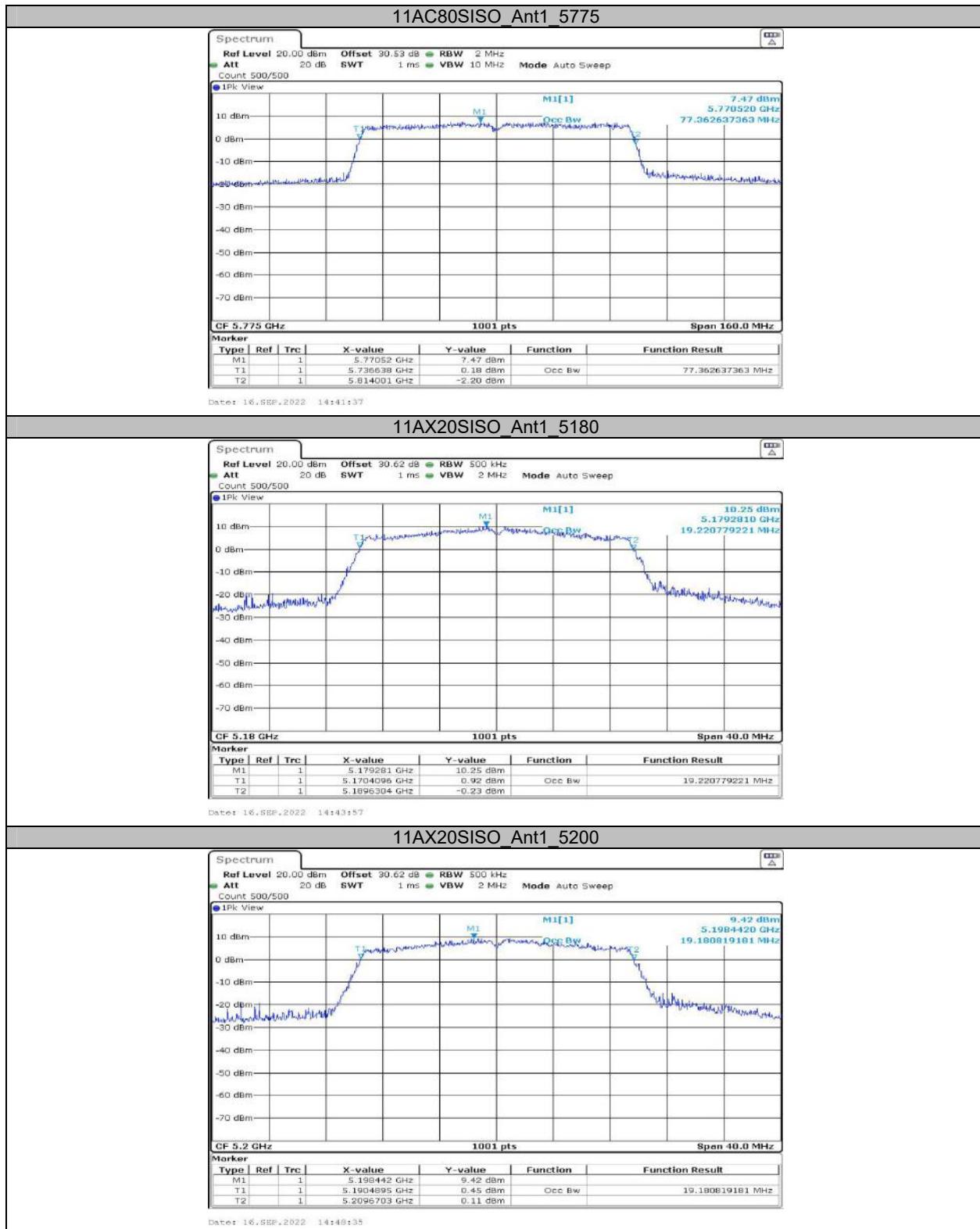


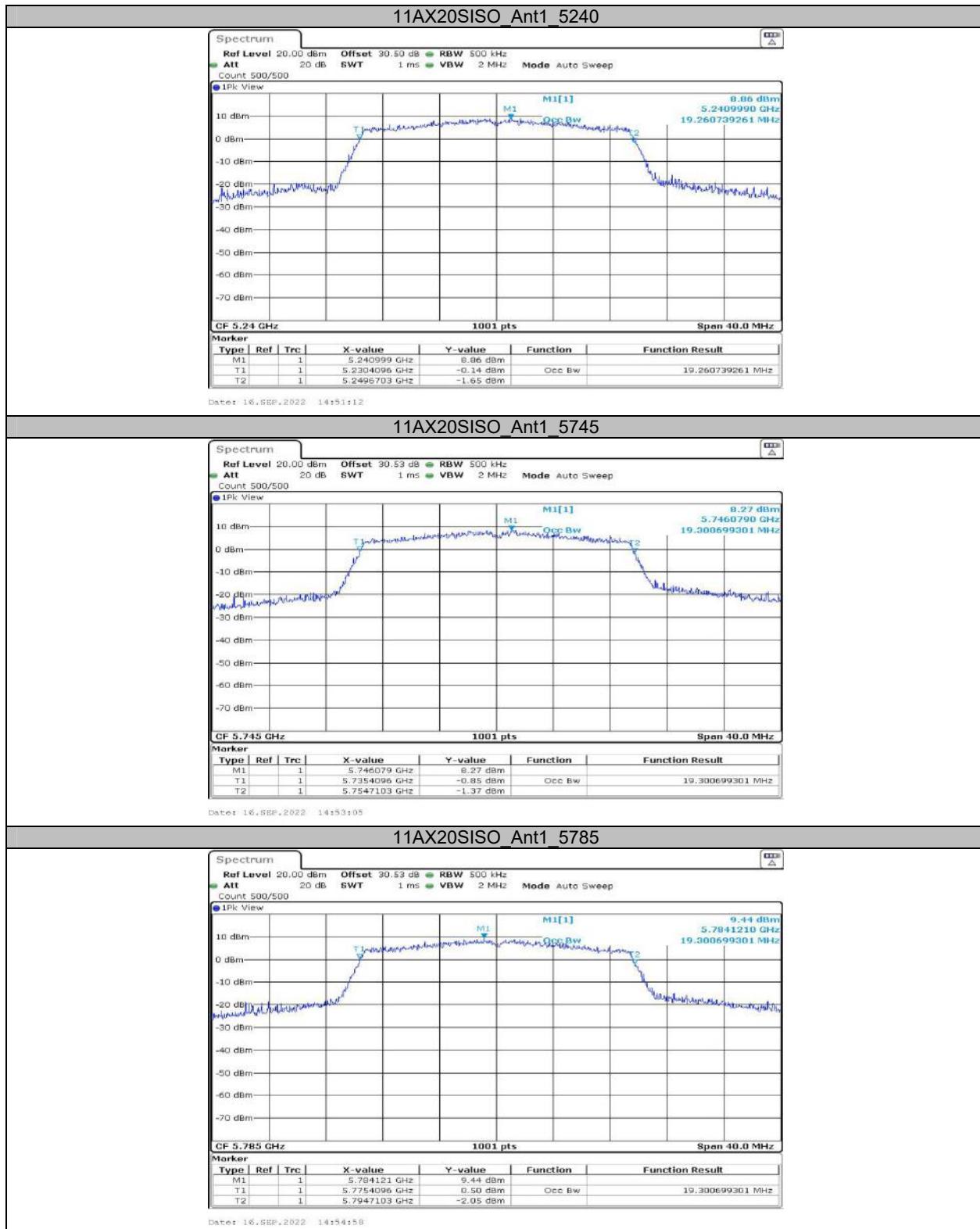


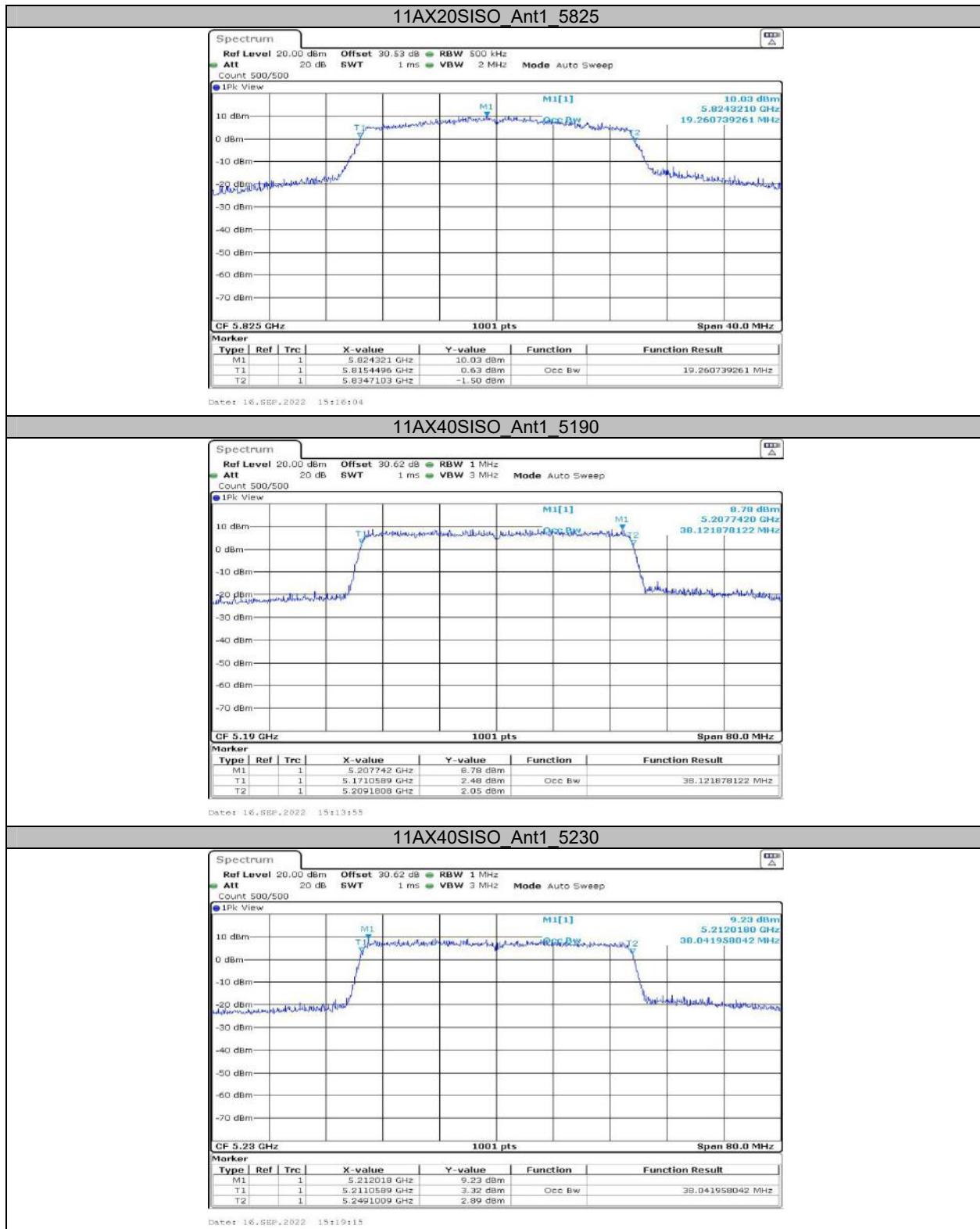


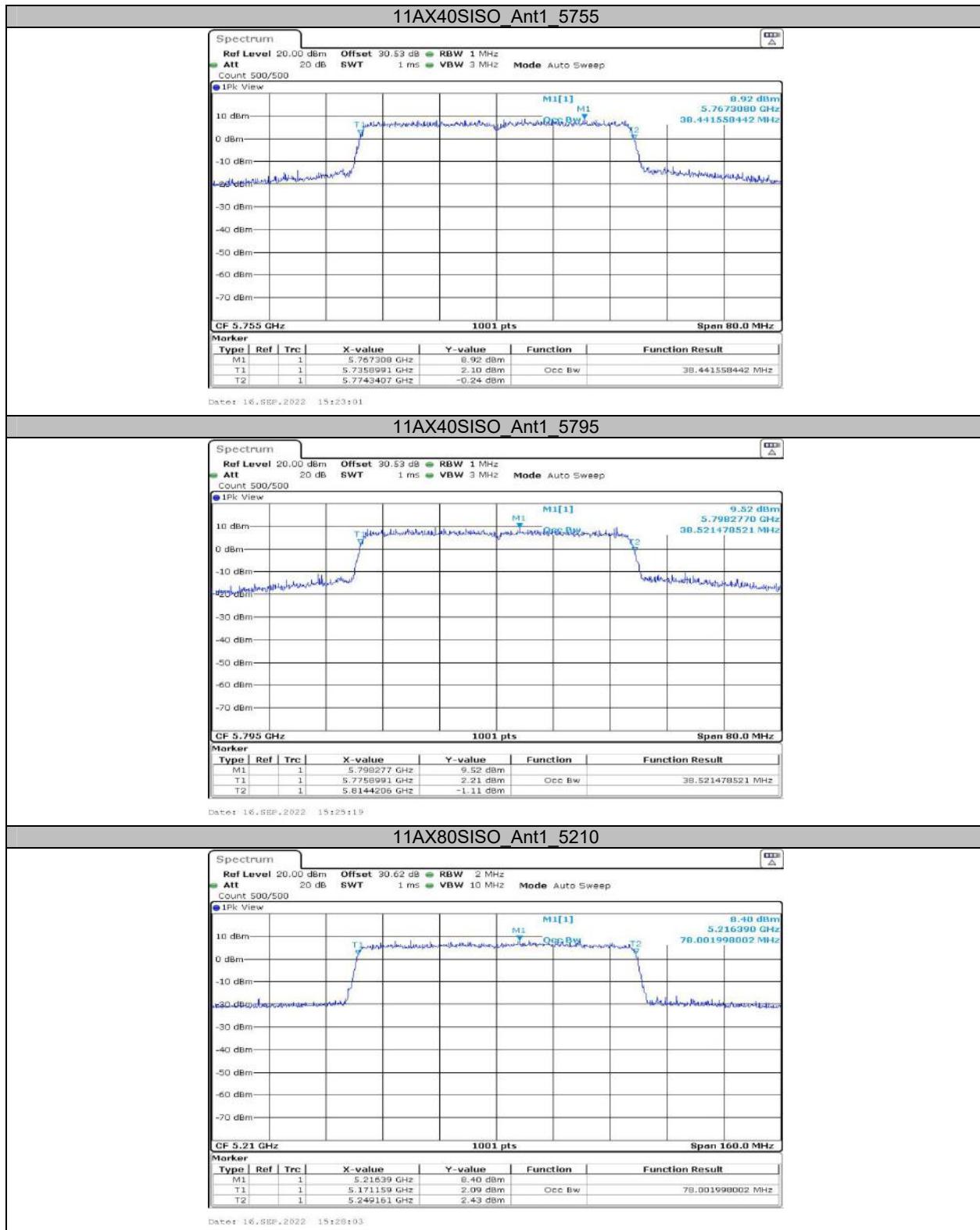














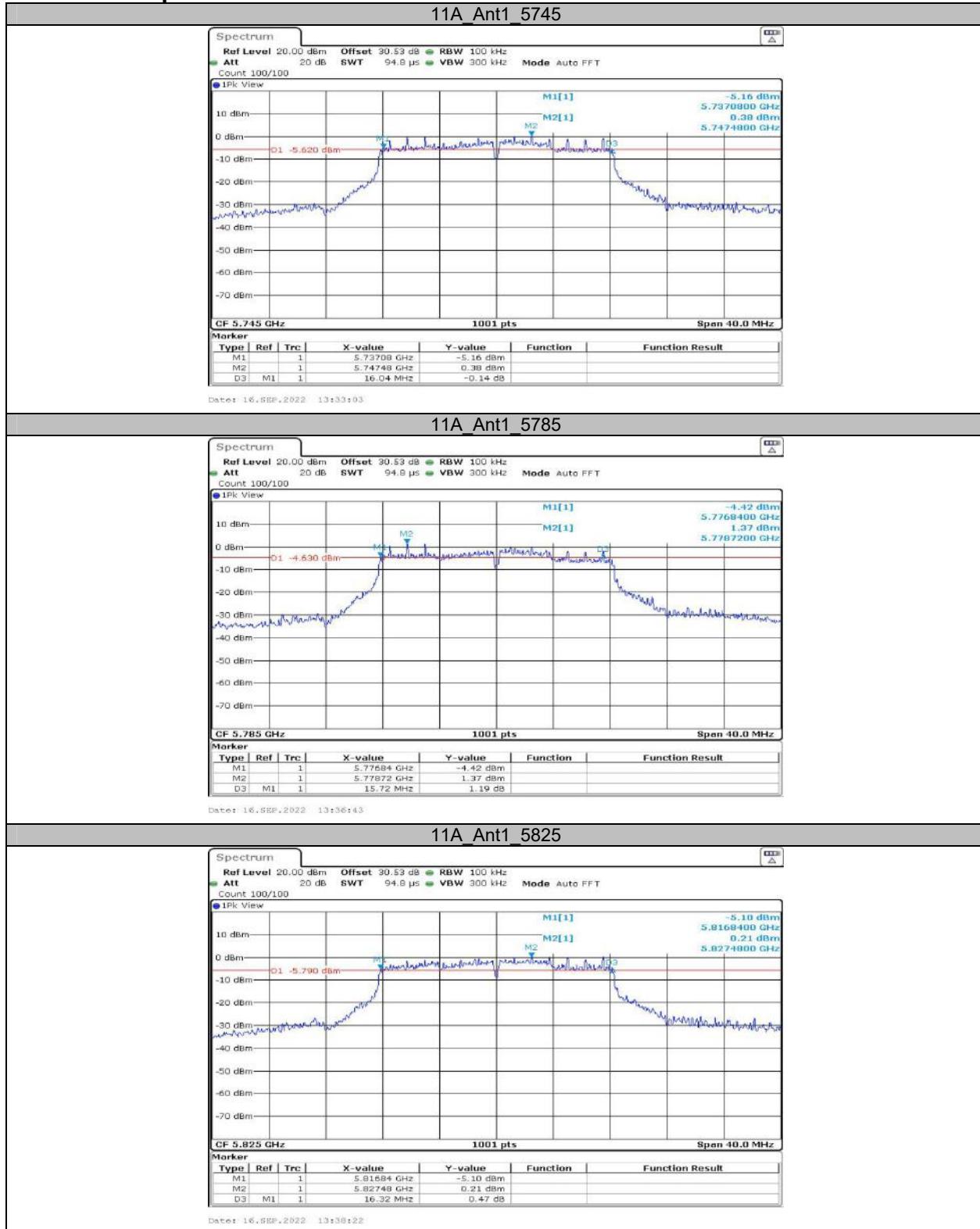
### Appendix A3: Min emission bandwidth Test Result

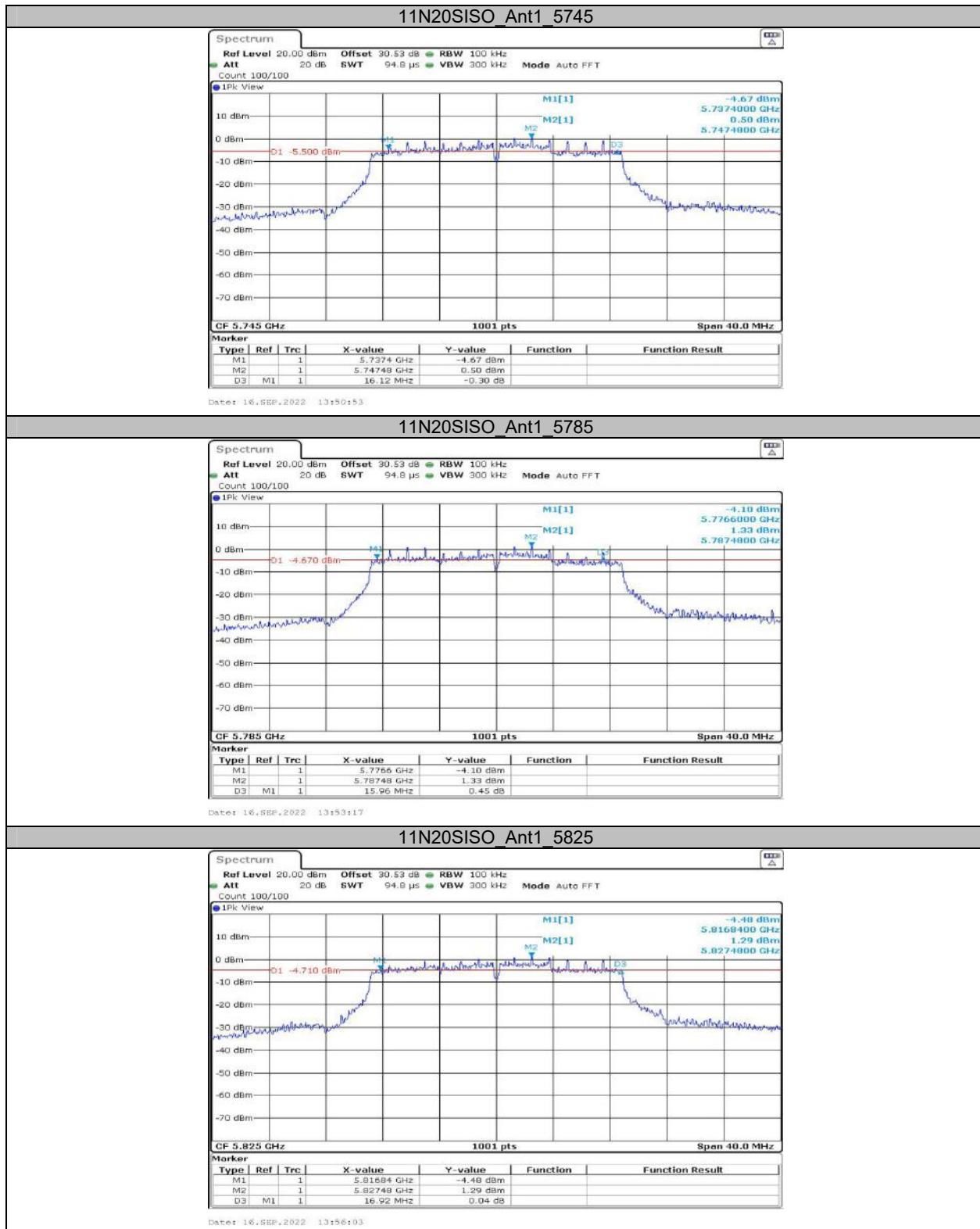
Test Mode	Antenna	Channel	6db EBW [MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.04	0.5	PASS
		5785	15.72	0.5	PASS
		5825	16.32	0.5	PASS
11N20SISO	Ant1	5745	16.12	0.5	PASS
		5785	15.96	0.5	PASS
		5825	16.92	0.5	PASS
11N40SISO	Ant1	5755	36.32	0.5	PASS
		5795	36.40	0.5	PASS
11AC20SISO	Ant1	5745	17.16	0.5	PASS
		5785	15.72	0.5	PASS
		5825	16.36	0.5	PASS
11AC40SISO	Ant1	5755	36.32	0.5	PASS
		5795	36.40	0.5	PASS
11AC80SISO	Ant1	5775	75.84	0.5	PASS

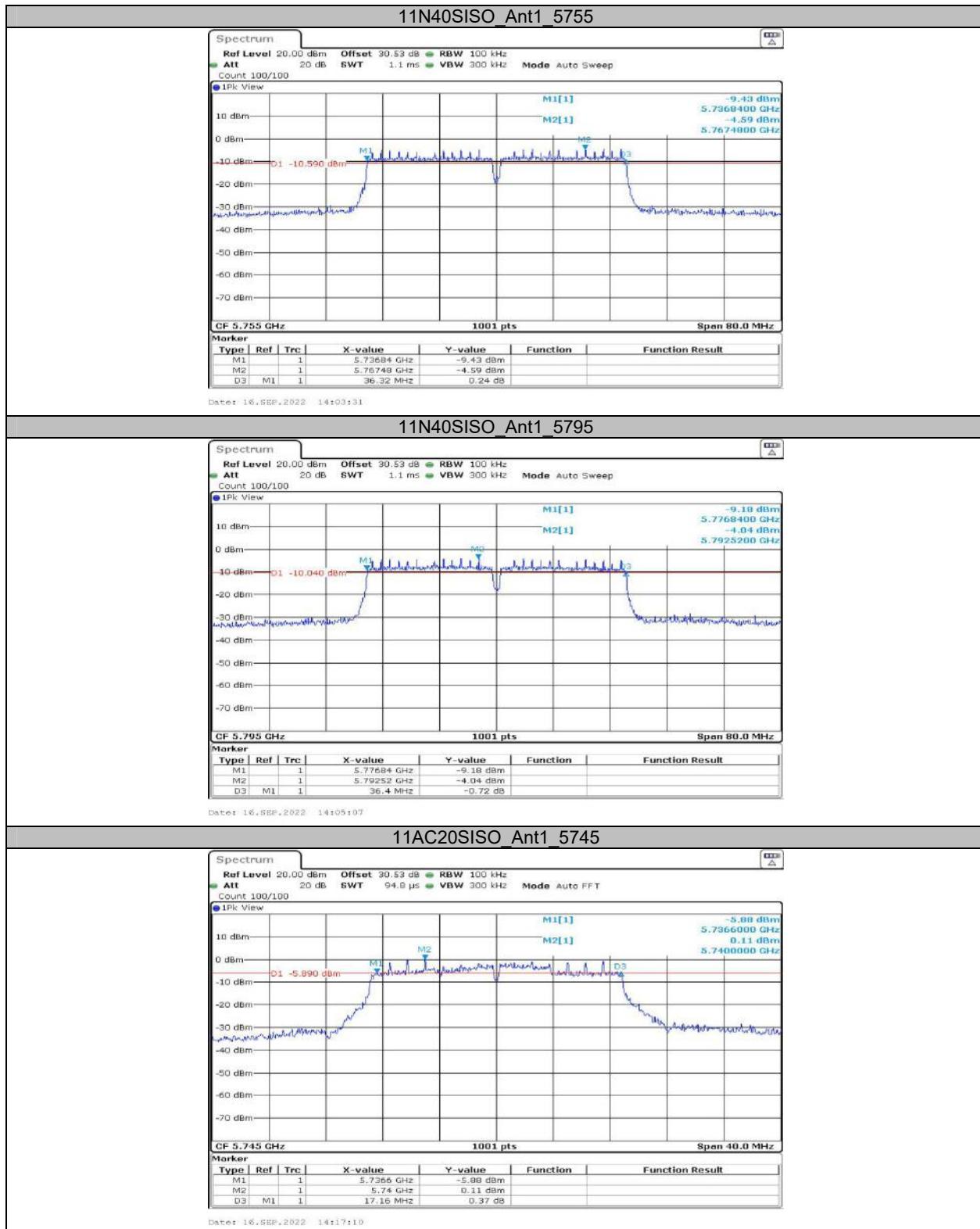
Test Mode	Antenna	Frequency[MHz]	Ru Size	Ru Index	6db BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11AX20SISO	Ant1	5745	26Tone	RU0	12.00	5735.52	5747.52	0.5	PASS
				RU8	2.04	5752.48	5754.52	0.5	PASS
		5785	26Tone	RU0	3.24	5775.48	5778.72	0.5	PASS
				RU8	2.08	5792.44	5794.52	0.5	PASS
		5825	26Tone	RU0	2.12	5815.44	5817.56	0.5	PASS
				RU8	2.04	5832.48	5834.52	0.5	PASS
11AX40SISO	Ant1	5755	26Tone	RU0	2.00	5736.04	5738.04	0.5	PASS
				RU17	1.92	5772.04	5773.96	0.5	PASS
		5795	26Tone	RU0	2.00	5776.04	5778.04	0.5	PASS
				RU17	2.00	5812.04	5814.04	0.5	PASS
11AX80SISO	Ant1	5775	26Tone	RU0	2.08	5735.96	5738.04	0.5	PASS
				RU36	2.08	5811.96	5814.04	0.5	PASS

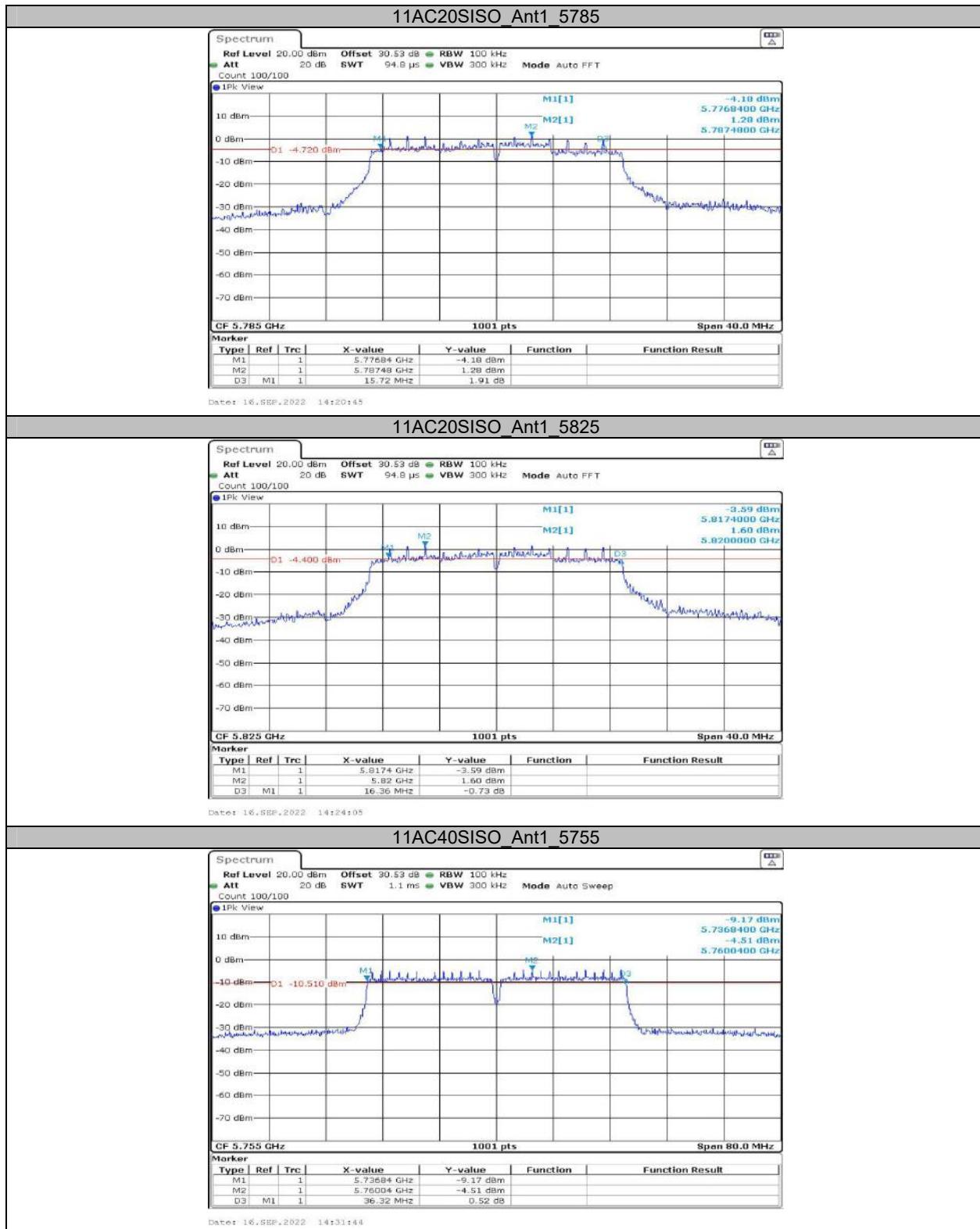
Note: For AX mode, the worst case is 26 Tone

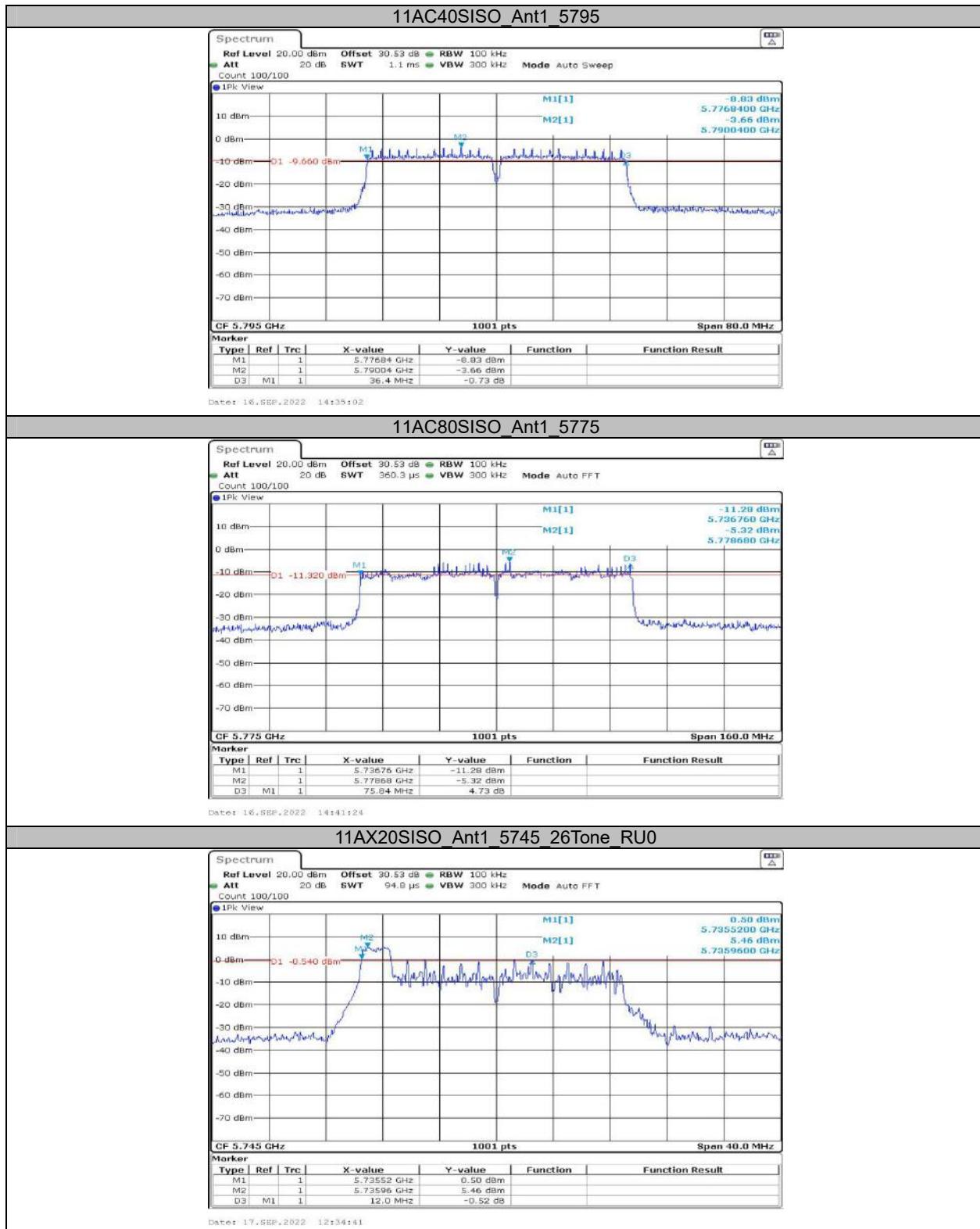
## Test Graphs

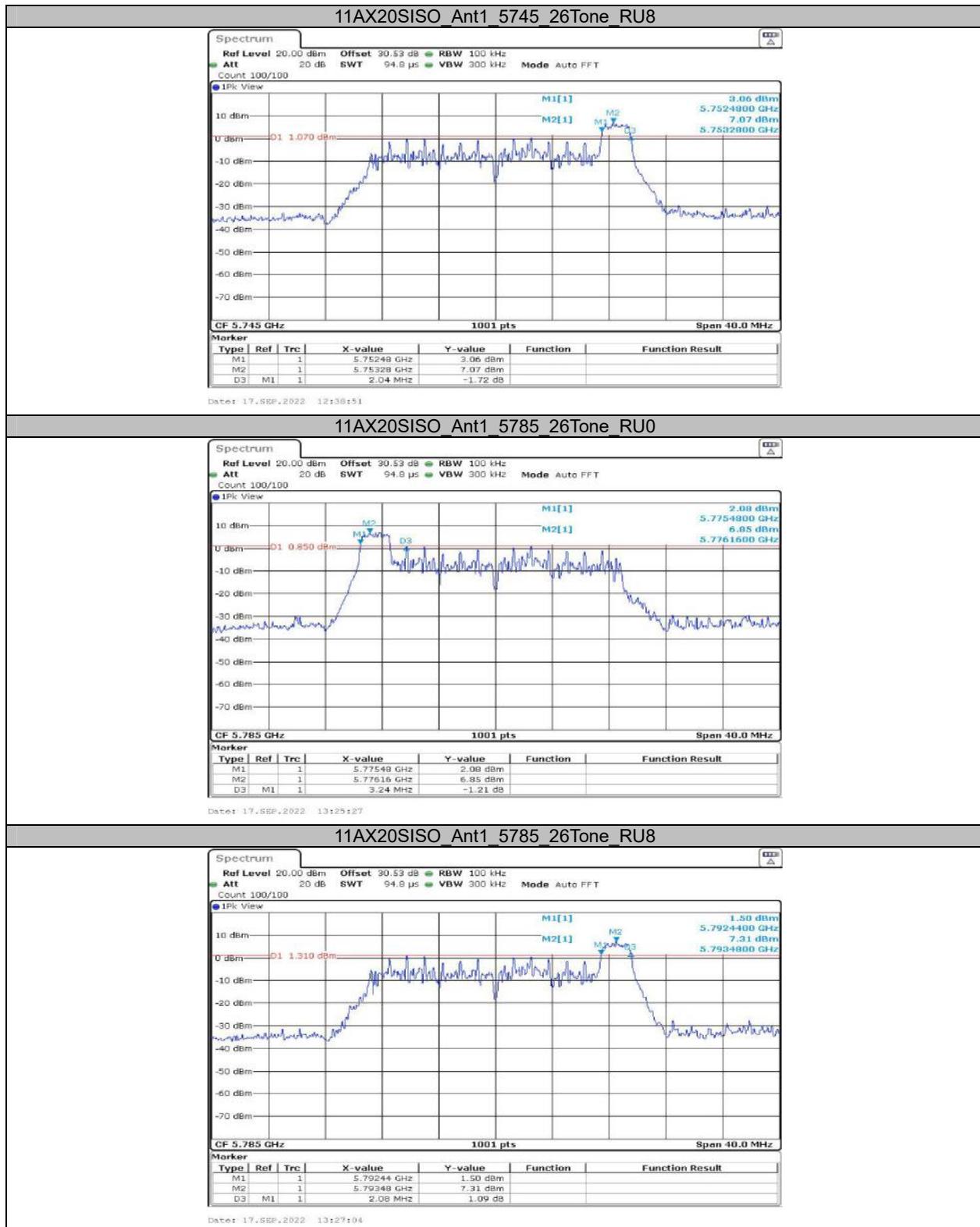


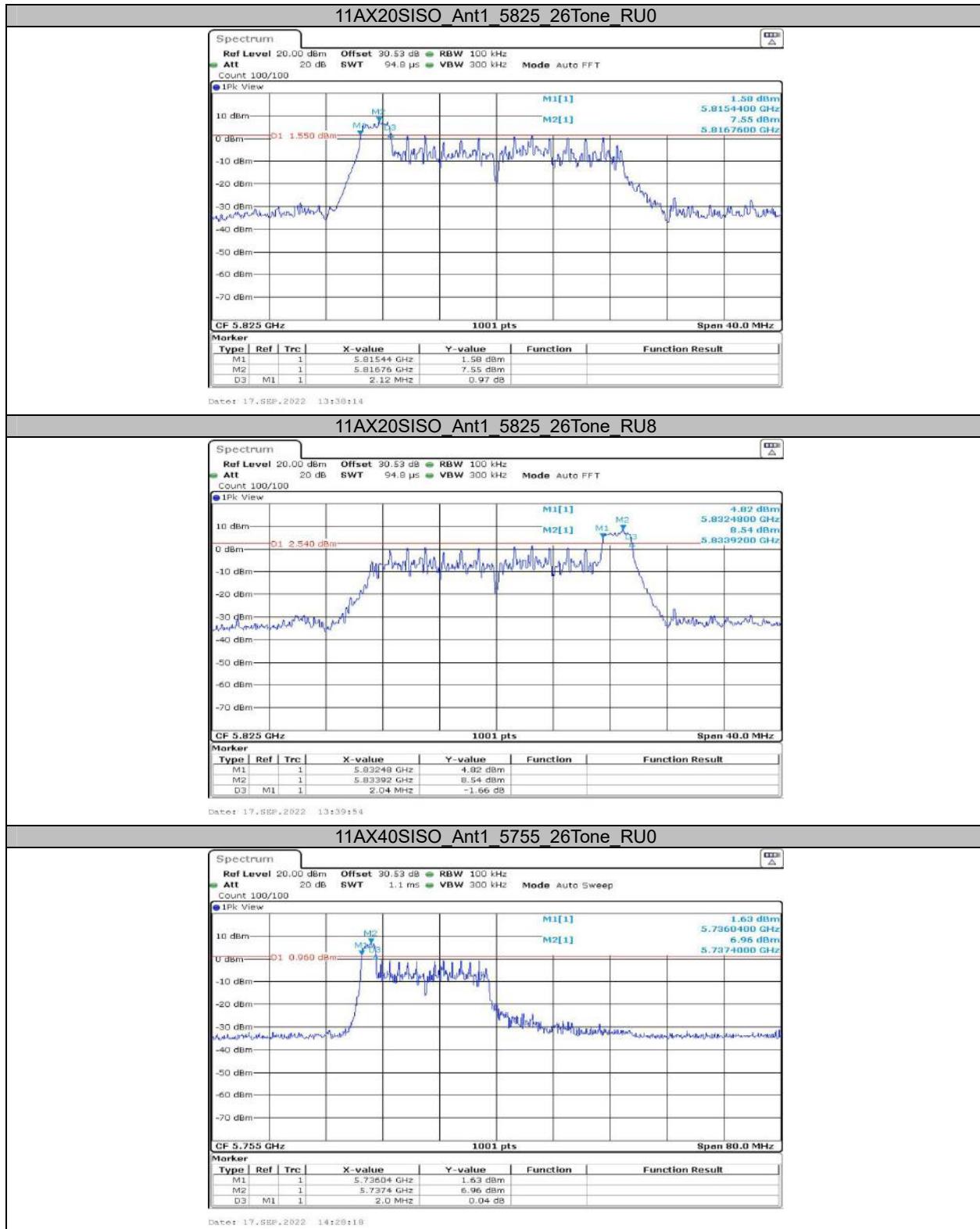


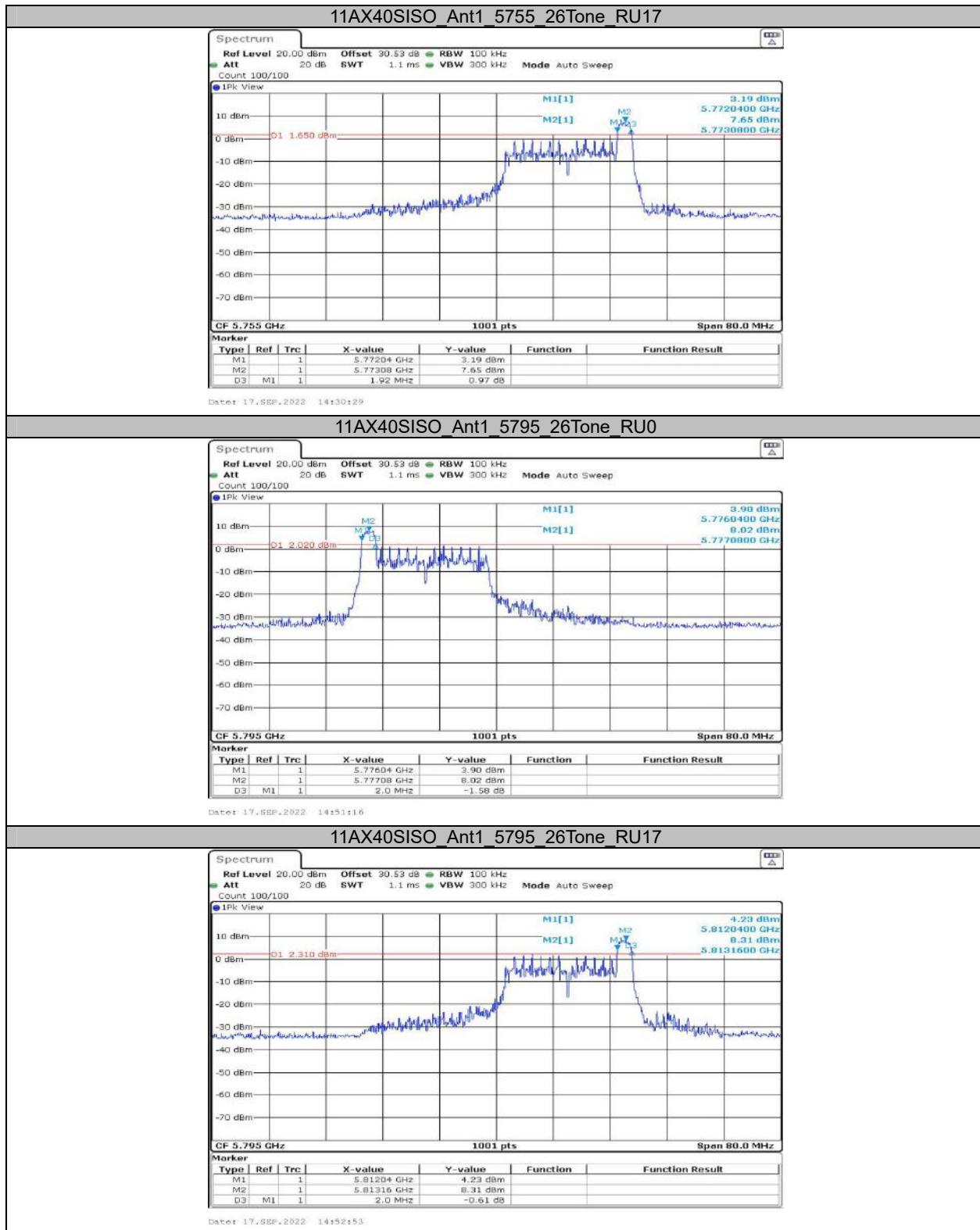


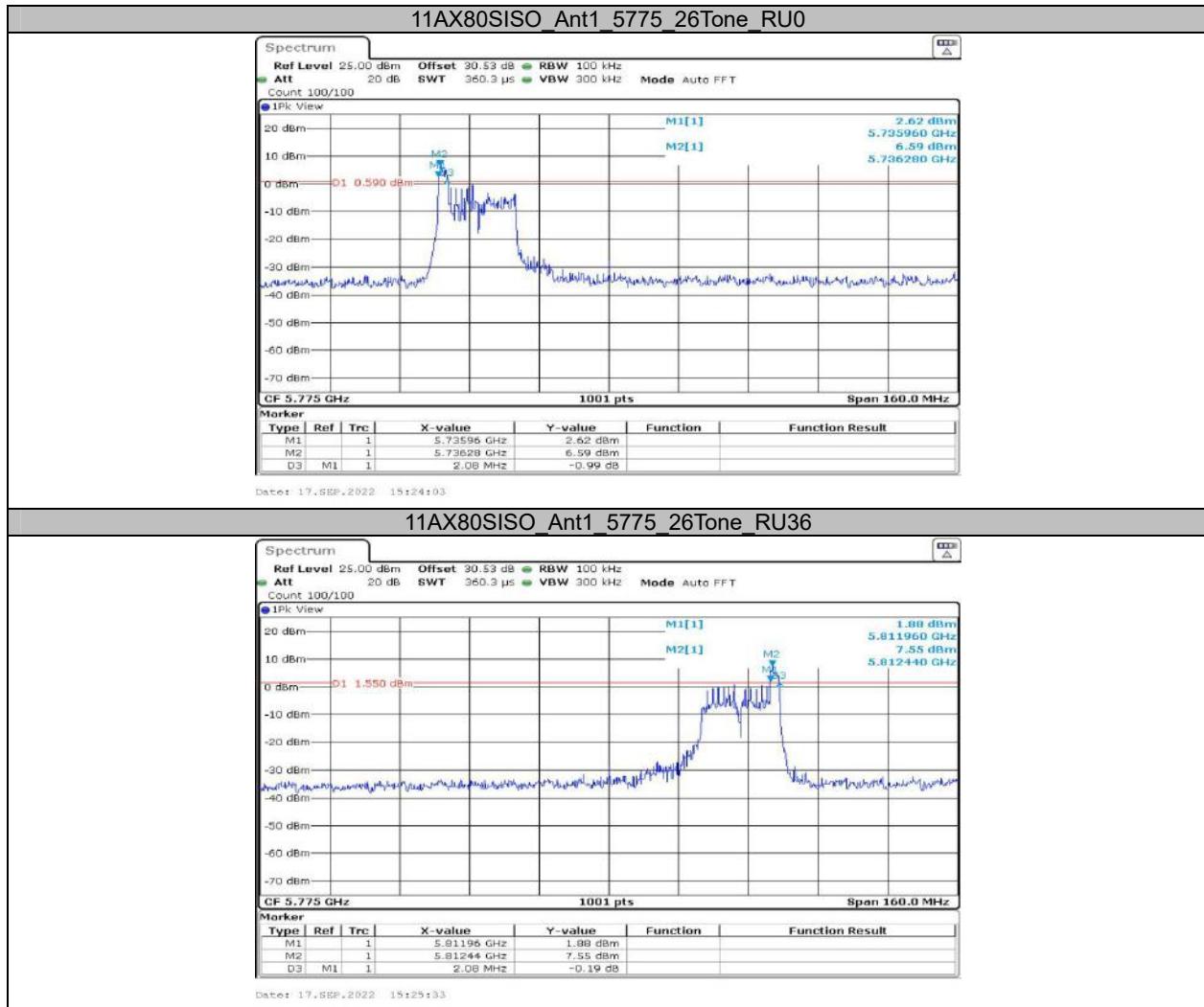












## Appendix B: Maximum conducted output power Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	17.20	≤23.98	PASS
		5200	17.06	≤23.98	PASS
		5240	16.95	≤23.98	PASS
		5745	16.16	≤30.00	PASS
		5785	16.70	≤30.00	PASS
		5825	17.57	≤30.00	PASS
11N20SISO	Ant1	5180	16.86	≤23.98	PASS
		5200	16.83	≤23.98	PASS
		5240	16.78	≤23.98	PASS
		5745	15.98	≤30.00	PASS
		5785	16.65	≤30.00	PASS
		5825	17.47	≤30.00	PASS
11N40SISO	Ant1	5190	16.95	≤23.98	PASS
		5230	17.03	≤23.98	PASS
		5755	14.87	≤30.00	PASS
		5795	15.41	≤30.00	PASS
11AC20SISO	Ant1	5180	16.97	≤23.98	PASS
		5200	16.81	≤23.98	PASS
		5240	16.77	≤23.98	PASS
		5745	16.02	≤30.00	PASS
		5785	16.67	≤30.00	PASS
		5825	17.55	≤30.00	PASS
11AC40SISO	Ant1	5190	16.98	≤23.98	PASS
		5230	17.18	≤23.98	PASS
		5755	15.00	≤30.00	PASS
		5795	15.47	≤30.00	PASS
11AC80SISO	Ant1	5210	17.05	≤23.98	PASS
		5775	15.92	≤30.00	PASS

Note: the duty cycle factor has added into final result.

Test Mode	Antenna	Frequency[MHz]	Ru Size	Ru Index	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11AX20SISO	Ant1	5180	26Tone	RU0	12.55	99.23	0.03	12.58	≤23.98	PASS
				RU8	12.40	98.85	0.05	12.45	≤23.98	PASS
			52Tone	RU37	12.60	98.12	0.08	12.68	≤23.98	PASS
				RU40	12.22	98.49	0.07	12.29	≤23.98	PASS
			106Tone	RU53	11.99	91.43	0.39	12.38	≤23.98	PASS
				RU54	11.90	91.43	0.39	12.29	≤23.98	PASS
			242Tone	RU61	11.58	80.95	0.92	12.50	≤23.98	PASS
		5200	26Tone	RU0	11.86	97.46	0.11	11.97	≤23.98	PASS
				RU8	12.42	96.61	0.15	12.57	≤23.98	PASS
			52Tone	RU37	11.88	93.75	0.28	12.16	≤23.98	PASS
				RU40	12.09	93.75	0.28	12.37	≤23.98	PASS
			106Tone	RU53	11.77	91.43	0.39	12.16	≤23.98	PASS
				RU54	11.91	91.43	0.39	12.30	≤23.98	PASS
			242Tone	RU61	11.49	80.95	0.92	12.41	≤23.98	PASS
		5240	26Tone	RU0	12.13	97.46	0.11	12.24	≤23.98	PASS
				RU8	12.00	95.76	0.19	12.19	≤23.98	PASS

			52Tone	RU37	12.04	93.75	0.28	12.32	$\leq 23.98$	PASS
				RU40	11.93	93.75	0.28	12.21	$\leq 23.98$	PASS
			106Tone	RU53	11.90	91.43	0.39	12.29	$\leq 23.98$	PASS
				RU54	11.96	91.43	0.39	12.35	$\leq 23.98$	PASS
			242Tone	RU61	11.53	80.95	0.92	12.45	$\leq 23.98$	PASS
			5745	RU0	11.19	97.46	0.11	11.30	$\leq 30.00$	PASS
				RU8	11.04	97.46	0.11	11.15	$\leq 30.00$	PASS
			52Tone	RU37	11.01	93.75	0.28	11.29	$\leq 30.00$	PASS
				RU40	10.84	93.75	0.28	11.12	$\leq 30.00$	PASS
			106Tone	RU53	10.80	91.43	0.39	11.19	$\leq 30.00$	PASS
				RU54	10.74	91.43	0.39	11.13	$\leq 30.00$	PASS
				RU61	8.07	85.00	0.71	8.78	$\leq 30.00$	PASS
				RU0	11.64	95.76	0.19	11.83	$\leq 30.00$	PASS
			5785	RU8	11.45	97.46	0.11	11.56	$\leq 30.00$	PASS
			52Tone	RU37	11.61	93.75	0.28	11.89	$\leq 30.00$	PASS
				RU40	11.38	93.75	0.28	11.66	$\leq 30.00$	PASS
			106Tone	RU53	11.53	91.43	0.39	11.92	$\leq 30.00$	PASS
				RU54	11.24	91.43	0.39	11.63	$\leq 30.00$	PASS
			242Tone	RU61	8.80	80.95	0.92	9.72	$\leq 30.00$	PASS
			5825	RU0	12.47	97.46	0.11	12.58	$\leq 30.00$	PASS
				RU8	12.23	97.46	0.11	12.34	$\leq 30.00$	PASS
			52Tone	RU37	12.44	93.75	0.28	12.72	$\leq 30.00$	PASS
				RU40	12.25	93.75	0.28	12.53	$\leq 30.00$	PASS
			106Tone	RU53	12.35	91.43	0.39	12.74	$\leq 30.00$	PASS
				RU54	12.18	94.12	0.26	12.44	$\leq 30.00$	PASS
			242Tone	RU61	9.53	80.95	0.92	10.45	$\leq 30.00$	PASS
			5190	RU0	12.27	97.46	0.11	12.38	$\leq 23.98$	PASS
				RU17	12.12	97.46	0.11	12.23	$\leq 23.98$	PASS
			52Tone	RU37	12.28	93.75	0.28	12.56	$\leq 23.98$	PASS
				RU44	12.16	93.75	0.28	12.44	$\leq 23.98$	PASS
			106Tone	RU53	12.29	91.43	0.39	12.68	$\leq 23.98$	PASS
				RU56	11.99	88.89	0.51	12.50	$\leq 23.98$	PASS
			242Tone	RU61	11.85	80.95	0.92	12.77	$\leq 23.98$	PASS
				RU62	11.76	80.95	0.92	12.68	$\leq 23.98$	PASS
			484Tone	RU65	11.29	80.00	0.97	12.26	$\leq 23.98$	PASS
			5230	RU0	12.17	97.46	0.11	12.28	$\leq 23.98$	PASS
				RU17	11.97	97.46	0.11	12.08	$\leq 23.98$	PASS
			52Tone	RU37	12.44	93.75	0.28	12.72	$\leq 23.98$	PASS
				RU44	11.93	93.75	0.28	12.21	$\leq 23.98$	PASS
			106Tone	RU53	12.42	88.89	0.51	12.93	$\leq 23.98$	PASS
				RU56	11.96	88.89	0.51	12.47	$\leq 23.98$	PASS
			242Tone	RU61	12.06	80.95	0.92	12.98	$\leq 23.98$	PASS
				RU62	11.64	80.95	0.92	12.56	$\leq 23.98$	PASS
			484Tone	RU65	11.47	80.00	0.97	12.44	$\leq 23.98$	PASS
			5755	RU0	10.89	97.46	0.11	11.00	$\leq 30.00$	PASS
				RU17	11.42	96.61	0.15	11.57	$\leq 30.00$	PASS
			52Tone	RU37	10.84	93.75	0.28	11.12	$\leq 30.00$	PASS
				RU44	11.51	93.75	0.28	11.79	$\leq 30.00$	PASS
			106Tone	RU53	10.61	88.89	0.51	11.12	$\leq 30.00$	PASS
				RU56	11.20	91.43	0.39	11.59	$\leq 30.00$	PASS
			242Tone	RU61	10.33	80.95	0.92	11.25	$\leq 30.00$	PASS
				RU62	10.81	80.95	0.92	11.73	$\leq 30.00$	PASS
			484Tone	RU65	7.69	80.00	0.97	8.66	$\leq 30.00$	PASS
			5795	RU0	12.12	98.29	0.07	12.19	$\leq 30.00$	PASS
				RU17	12.33	97.46	0.11	12.44	$\leq 30.00$	PASS

			52Tone	RU37	12.03	93.75	0.28	12.31	$\leq 30.00$	PASS	
				RU44	11.36	93.75	0.28	11.64	$\leq 30.00$	PASS	
				106Tone	RU53	11.21	88.89	0.51	11.72	$\leq 30.00$	PASS
					RU56	11.39	91.43	0.39	11.78	$\leq 30.00$	PASS
				242Tone	RU61	11.02	80.95	0.92	11.94	$\leq 30.00$	PASS
					RU62	11.17	80.95	0.92	12.09	$\leq 30.00$	PASS
				484Tone	RU65	8.30	80.00	0.97	9.27	$\leq 30.00$	PASS
			26Tone	RU0	11.48	97.46	0.11	11.59	$\leq 23.98$	PASS	
				RU36	10.93	97.46	0.11	11.04	$\leq 23.98$	PASS	
				52Tone	RU37	11.52	93.75	0.28	11.80	$\leq 23.98$	PASS
					RU52	10.91	93.75	0.28	11.19	$\leq 23.98$	PASS
				106Tone	RU53	11.24	91.43	0.39	11.63	$\leq 23.98$	PASS
					RU60	10.88	88.89	0.51	11.39	$\leq 23.98$	PASS
				242Tone	RU61	10.96	80.95	0.92	11.88	$\leq 23.98$	PASS
					RU64	10.70	80.95	0.92	11.62	$\leq 23.98$	PASS
				484Tone	RU65	10.23	80.00	0.97	11.20	$\leq 23.98$	PASS
					RU66	10.46	80.00	0.97	11.43	$\leq 23.98$	PASS
				996Tone	RU67	10.15	69.23	1.60	11.75	$\leq 23.98$	PASS
11AX80SISO	Ant1	5210	5775	26Tone	RU0	10.81	97.46	0.11	10.92	$\leq 30.00$	PASS
					RU36	11.82	96.61	0.15	11.97	$\leq 30.00$	PASS
				52Tone	RU37	10.82	93.75	0.28	11.10	$\leq 30.00$	PASS
					RU52	11.62	93.75	0.28	11.90	$\leq 30.00$	PASS
				106Tone	RU53	10.68	88.89	0.51	11.19	$\leq 30.00$	PASS
					RU60	11.51	88.89	0.51	12.02	$\leq 30.00$	PASS
				242Tone	RU61	10.34	80.95	0.92	11.26	$\leq 30.00$	PASS
					RU64	11.20	80.95	0.92	12.12	$\leq 30.00$	PASS
				484Tone	RU65	9.86	80.00	0.97	10.83	$\leq 30.00$	PASS
					RU66	10.35	80.00	0.97	11.32	$\leq 30.00$	PASS
				996Tone	RU67	8.82	69.23	1.60	10.42	$\leq 30.00$	PASS

### Appendix C: Maximum power spectral density Test Result

Test Mode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	7.16	≤11.00	PASS
		5200	6.99	≤11.00	PASS
		5240	7.02	≤11.00	PASS
		5745	4.48	≤30.00	PASS
		5785	5.55	≤30.00	PASS
		5825	6.21	≤30.00	PASS
11N20SISO	Ant1	5180	7.02	≤11.00	PASS
		5200	6.72	≤11.00	PASS
		5240	7.09	≤11.00	PASS
		5745	4.29	≤30.00	PASS
		5785	5.17	≤30.00	PASS
		5825	5.8	≤30.00	PASS
11N40SISO	Ant1	5190	2.71	≤11.00	PASS
		5230	3	≤11.00	PASS
		5755	-0.27	≤30.00	PASS
		5795	-0.49	≤30.00	PASS
11AC20SISO	Ant1	5180	6.37	≤11.00	PASS
		5200	6.58	≤11.00	PASS
		5240	6.39	≤11.00	PASS
		5745	4.33	≤30.00	PASS
		5785	5.09	≤30.00	PASS
		5825	5.56	≤30.00	PASS
11AC40SISO	Ant1	5190	2.82	≤11.00	PASS
		5230	3.22	≤11.00	PASS
		5755	-0.35	≤30.00	PASS
		5795	-0.32	≤30.00	PASS
11AC80SISO	Ant1	5210	-0.46	≤11.00	PASS
		5775	-2.98	≤30.00	PASS

Test Mode	Antenna	Frequency[MHz]	Ru Size	Ru Index	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11AX20SISO	Ant1	5180	26Tone	RU0	9.82	≤11.00	PASS
				RU8	9.61	≤11.00	PASS
			52Tone	RU37	7.09	≤11.00	PASS
				RU40	6.81	≤11.00	PASS
			106Tone	RU53	3.66	≤11.00	PASS
				RU54	3.6	≤11.00	PASS
			242Tone	RU61	0.99	≤11.00	PASS
		5200	26Tone	RU0	9.09	≤11.00	PASS
				RU8	9.58	≤11.00	PASS
			52Tone	RU37	6.4	≤11.00	PASS
				RU40	7.04	≤11.00	PASS
			106Tone	RU53	3.37	≤11.00	PASS
				RU54	3.61	≤11.00	PASS
			242Tone	RU61	0.74	≤11.00	PASS
		5240	26Tone	RU0	9.36	≤11.00	PASS
				RU8	9.28	≤11.00	PASS
			52Tone	RU37	6.79	≤11.00	PASS
				RU40	6.6	≤11.00	PASS

	11AX40SISO	Ant1		106Tone	RU53	3.58	$\leq 11.00$	PASS
				RU54	3.83	$\leq 11.00$	$\leq 11.00$	PASS
				242Tone	RU61	0.73	$\leq 11.00$	PASS
			5745	26Tone	RU0	5.68	$\leq 30.00$	PASS
				RU8	5.53	$\leq 30.00$	$\leq 30.00$	PASS
				52Tone	RU37	2.64	$\leq 30.00$	PASS
				RU40	2.53	$\leq 30.00$	$\leq 30.00$	PASS
				106Tone	RU53	-0.48	$\leq 30.00$	PASS
				RU54	-0.62	$\leq 30.00$	$\leq 30.00$	PASS
			5785	242Tone	RU61	-5.91	$\leq 30.00$	PASS
				26Tone	RU0	5.92	$\leq 30.00$	PASS
				RU8	5.68	$\leq 30.00$	$\leq 30.00$	PASS
				52Tone	RU37	3.13	$\leq 30.00$	PASS
				RU40	3.03	$\leq 30.00$	$\leq 30.00$	PASS
				106Tone	RU53	0.18	$\leq 30.00$	PASS
			5825	RU54	-0.11	$\leq 30.00$	$\leq 30.00$	PASS
				242Tone	RU61	-4.82	$\leq 30.00$	PASS
				26Tone	RU0	7.03	$\leq 30.00$	PASS
				RU8	6.76	$\leq 30.00$	$\leq 30.00$	PASS
				52Tone	RU37	4.03	$\leq 30.00$	PASS
				RU40	4.13	$\leq 30.00$	$\leq 30.00$	PASS
			5190	106Tone	RU53	1.07	$\leq 30.00$	PASS
				RU54	1.17	$\leq 30.00$	$\leq 30.00$	PASS
				242Tone	RU61	-3.85	$\leq 30.00$	PASS
				26Tone	RU0	9.66	$\leq 11.00$	PASS
				RU17	9.6	$\leq 11.00$	$\leq 11.00$	PASS
				52Tone	RU37	7.15	$\leq 11.00$	PASS
			5230	RU44	6.75	$\leq 11.00$	$\leq 11.00$	PASS
				106Tone	RU53	4.12	$\leq 11.00$	PASS
				RU56	4.06	$\leq 11.00$	$\leq 11.00$	PASS
				242Tone	RU61	0.98	$\leq 11.00$	PASS
				RU62	0.81	$\leq 11.00$	$\leq 11.00$	PASS
				484Tone	RU65	-2.36	$\leq 11.00$	PASS
			5755	26Tone	RU0	9.33	$\leq 11.00$	PASS
				RU17	9.36	$\leq 11.00$	$\leq 11.00$	PASS
				52Tone	RU37	7.34	$\leq 11.00$	PASS
				RU44	6.72	$\leq 11.00$	$\leq 11.00$	PASS
				106Tone	RU53	4.44	$\leq 11.00$	PASS
				RU56	3.78	$\leq 11.00$	$\leq 11.00$	PASS
			5795	242Tone	RU61	1.21	$\leq 11.00$	PASS
				RU62	0.84	$\leq 11.00$	$\leq 11.00$	PASS
				484Tone	RU65	-2.06	$\leq 11.00$	PASS
				26Tone	RU0	5.62	$\leq 30.00$	PASS
				RU17	6.14	$\leq 30.00$	$\leq 30.00$	PASS
				52Tone	RU37	2.58	$\leq 30.00$	PASS
				RU44	3.19	$\leq 30.00$	$\leq 30.00$	PASS
				106Tone	RU53	-0.63	$\leq 30.00$	PASS
				RU56	0.3	$\leq 30.00$	$\leq 30.00$	PASS
				242Tone	RU61	-3.27	$\leq 30.00$	PASS
				RU62	-2.78	$\leq 30.00$	$\leq 30.00$	PASS
				484Tone	RU65	-8.57	$\leq 30.00$	PASS
				26Tone	RU0	6.68	$\leq 30.00$	PASS
				RU17	7.27	$\leq 30.00$	$\leq 30.00$	PASS
				52Tone	RU37	3.89	$\leq 30.00$	PASS
				RU44	3.11	$\leq 30.00$	$\leq 30.00$	PASS

			106Tone	RU53	0.41	$\leq 30.00$	PASS
				RU56	0.25	$\leq 30.00$	PASS
242Tone		5210		RU61	-2.86	$\leq 30.00$	PASS
				RU62	-2.25	$\leq 30.00$	PASS
			484Tone	RU65	-8.09	$\leq 30.00$	PASS
11AX80SISO	Ant1	5210	26Tone	RU0	8.95	$\leq 11.00$	PASS
				RU36	7.96	$\leq 11.00$	PASS
			52Tone	RU37	6.3	$\leq 11.00$	PASS
				RU52	5.58	$\leq 11.00$	PASS
			106Tone	RU53	3.25	$\leq 11.00$	PASS
				RU60	2.84	$\leq 11.00$	PASS
			242Tone	RU61	0.02	$\leq 11.00$	PASS
				RU64	-0.07	$\leq 11.00$	PASS
484Tone		5775		RU65	-3.24	$\leq 11.00$	PASS
				RU66	-2.88	$\leq 11.00$	PASS
			996Tone	RU67	-5.54	$\leq 11.00$	PASS
			26Tone	RU0	5.39	$\leq 30.00$	PASS
				RU36	6.98	$\leq 30.00$	PASS
			52Tone	RU37	2.52	$\leq 30.00$	PASS
				RU52	3.38	$\leq 30.00$	PASS
			106Tone	RU53	-0.48	$\leq 30.00$	PASS
242Tone		5775		RU60	0.17	$\leq 30.00$	PASS
				RU61	-3.46	$\leq 30.00$	PASS
				RU64	-2.65	$\leq 30.00$	PASS
			484Tone	RU65	-6.28	$\leq 30.00$	PASS
484Tone		5775		RU66	-5.92	$\leq 30.00$	PASS
				RU67	-9.29	$\leq 30.00$	PASS

Note: 1. The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2. The Duty Cycle Factor is compensated in the graph.

## Test Graphs

